



Thermo Scientific Pierce Large Volume and Custom Reagents for Assay Development



Part of Thermo Fisher Scientific

## Custom and Bulk Services

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# Need more product than our catalog package size offers?

Partner with us to scale-up your process or product development pipeline with special pricing on bulk quantities of our high quality immunoassay reagents and biochemicals. We have been supplying bulk and custom made reagents to the biotechnology, diagnostic and pharmaceutical industry for over 50 years.

Contact our experts in the Bulk and Custom Sales Department or contact your local distributor to discuss your project or request a bulk pricing on our catalog products.



Popular immunoassay reagents, protein purification supports, sample preparation devices, recombinant proteins and antibodies are supplied in bulk quantities. Custom microplate coating services are also available for assay product development (IVD) or screening (HTS) applications. We can also accommodate a variety of special packaging requests and formulations to accommodate your production schedule.

Our quality system is certified to ISO 9001 so manufactured products have validated manufacturing procedures and testing to maintain consistency. Rely on us to provide lot-to-lot consistency, QC methods development, multiple lot validation and large-scale lot production.

#### Secondary Detection Reagents

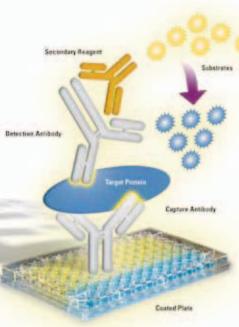
A wide range of labeled and unlabeled secondary antibodies, biotin detection reagents and reactive enzymes to suit your assay.

**New:** Poly-HRP Streptavidin: substantially higher signal amplification compared to standard HRP-conjugates.

#### Antibodies

Find a suitable antibody in our collection of more than 30,000 high quality antibodies.

**New:** Custom polyclonal and monoclonal antibody development.



#### **Substrates**

Colorimetric, chemiluminescent or fluorescent substrates? All offer optimal sensitivity and linearity.

#### **Fluorescent Dyes**

Say goodbye to CyDye® and Alexa Fluor® Dyes! Thermo Scientific DyLight Fluorescent Dyes are a great alternative: excellent photostability and water solubility. Attractive licensing conditions without upfront fees for commercial use.

#### Wash Buffers

Convenient wash buffers in dry blend or concentrated liquid formats.

#### **Coated Microwell Plates**

Use our custom plate-coating service for a consistent, quality-controlled product every time.

**New**: Thermo Scientific High Sensitivity Streptavidin and NeutrAvidin Coated Plates, for as little as 5ng/ml of biotinylated IgG.

## **Blocking Buffers**

Our Blocking Buffers and high-purity detergents can make a huge difference in your immunoassay!

New: Nuclease-free Casein blocking buffer.



# Thermo Scientific Coated Plates and Custom Coating Service

# Biotin-Binding Proteins NeutrAvidin Biotin-Binding Protein and Streptavidin

- Thermo Scientific NeutrAvidin Biotin-Binding Protein for low nonspecific binding, Streptavidin or Avidin
- Manufactured in ISO 9001 environment
- Superior lot-to-lot consistency
- Custom packaging and bulk packaging available
- Short lead times

Ordering Information	
Product #	Coating
21135	Streptavidin
31050	NeutrAvidin Biotin-Binding Protein
31055	NeutrAvidin Biotin-Binding Protein

# Coated Plates NeutrAvidin Protein and Streptavidin Coated Plates

A wide variety of pre-coated microplates to minimize assay variation.

Thermo Scientific Pierce standard coated polystyrene plates are ideal for binding assays using biotinylated molecules. NeutrAvidin coated plates offer the high affinity of avidin, without the non-specific binding problems.

- · Easy and gentle immobilization of biotin-containing conjugates
- No denaturing of the protein component of a conjugate upon binding
- Low nonspecific binding

	NeutrAvidin Protein	Streptavidin	NeutrAvidin Protein HBC	Streptavidin HBC
96-well plates	15 pmoles/well	5 pmoles/well	60 pmoles/well	125 pmoles/well
384-well plates	10 pmoles/well	4 pmoles/well	35 pmoles/well	60 pmoles/well

#### **Ordering Information**

Product #	Coating, Coating Volume	Plate Type	Blocking Buffer <sup>*</sup> , Volume
15124	Streptavidin, 100 µl	Clear, 96-well	SuperBlock BB, 200 µl
15120	Streptavidin, 100 µl	Clear, 8-well strip	SuperBlock BB, 200 µl
15405	Streptavidin, 50 µl	Clear, 384-well	SuperBlock BB, 100 µl
15118	Streptavidin, 100 µl	White, 96-well	SuperBlock BB, 200 µl
15119	Streptavidin, 100 µl	Black, 96-well	SuperBlock BB, 200 µl
15407	Streptavidin, 50 µl	Black, 384-well	SuperBlock BB, 100 µl
15125	Streptavidin, 200 µl	Clear, 96-well	Blocker BSA, 300 µl
15121	Streptavidin, 200 µl	Clear, 8-well strip	Blocker BSA, 300 µl
15218	Streptavidin, 200 µl	White, 96-well	Blocker BSA, 300 µl
15219	Streptavidin, 200 µl	Black, 96-well	Blocker BSA, 300 µl
15129	NeutrAvidin Protein, 100 µl	Clear, 96-well	SuperBlock BB, 200 µl
15127	NeutrAvidin Protein, 100 µl	Clear, 8-well strip	SuperBlock BB, 200 µl
15400	NeutrAvidin Protein, 50 µl	Clear, 384-well	SuperBlock BB, 100 µl
15116	NeutrAvidin Protein, 100 µl	White, 96-well	SuperBlock BB, 200 µl
15401	NeutrAvidin Protein, 50 µl	White, 384-well	SuperBlock BB, 100 µl
15117	NeutrAvidin Protein, 100 µl	Black, 96-well	SuperBlock BB, 200 µl
15402	NeutrAvidin Protein, 50 µl	Black, 384-well	SuperBlock BB, 100 µl
15123	NeutrAvidin Protein, 200 µl	Clear, 96-well	Blocker BSA, 300 µl
15128	NeutrAvidin Protein, 200 µl	Clear, 8-well strip	Blocker BSA, 300 µl
15216	NeutrAvidin Protein, 200 µl	White, 96-well	Blocker BSA, 300 µl
15217	NeutrAvidin Protein, 200 µl	Black, 96-well	Blocker BSA, 300 µl

<sup>†</sup>BB = Blocking Buffer



# High Sensitivity Biotin-Binding Plates for Low-level Target Detection

Thermo Scientific Pierce High Sensitivity Streptavidin and NeutrAvidin Plates are coated using proprietary surface activation technology to achieve maximum efficient coating of active biotin-binding proteins. Our high sensitivity plates enable detection of low concentrations (ng/ml) of biotinylated antibodies and other proteins. Whether detecting your signal by fluorescent, colorimetric or chemiluminescent methods, these plates make it easy to develop an ELISA for any sample with a low-level target.

- Sensitive detect down to 5 ng/ml of biotinylated IgG
- Specific low background with high signal-to-noise ratios
- Versatile use either fluorescence, chemiluminescence or colorimetric detection
- Robust broad dynamic range
- Ready to use plates are supplied pre-blocked to save time

Ordering Information		
Product #	Description	Plate Type
15520	Pierce High Sensitivity Streptavidin Coated Plates	Clear, 96-well strip plates
15525	Pierce High Sensitivity Streptavidin Coated Plates	Black, 96-well strip plates
15530	Pierce High Sensitivity NeutrAvidin Coated Plates	Clear, 96-well strip plates
15535	Pierce High Sensitivity NeutrAvidin Coated Plates	Black, 96-well strip plates

# NeutrAvidin and Streptavidin High Binding Capacity (HBC) Coated Plates

#### Unique technology for improved assay precision.

Our proprietary plate coating technology produces Streptavidin and NeutrAvidin Coated Plates with wider detection limits than our regular binding capacity plates. Standard curves produced using these plates exhibit greater linearity for detecting small biotinylated molecules such as peptides and oligo-nucleotides, resulting in greater assay precision.

- Unique plate-coating technology
- · Improved sensitivity
- Broader dynamic range
- · Flexible assay formats

#### **Ordering Information**

Product #	Coating, Coating Volume	Plate Type	Blocking Buffer <sup>*</sup> , Volume
15507	HBC NeutrAvidin Protein, 100 µl	Clear, 96-well	SuperBlock BB, 200 µl
15508	HBC NeutrAvidin Protein, 100 µl	Clear, 8-well strip	SuperBlock BB, 200 µl
15511	HBC NeutrAvidin Protein, 50 µl	Clear, 384-well	SuperBlock BB, 100 µl
15509	HBC NeutrAvidin Protein, 100 µl	White, 96-well	SuperBlock BB, 200 µl
15512	HBC NeutrAvidin Protein, 50 µl	White, 384-well	SuperBlock BB, 100 µl
15510	HBC NeutrAvidin Protein, 100 µl	Black, 96-well	SuperBlock BB, 200 µl
15513	HBC NeutrAvidin Protein, 50 µl	Black, 384-well	SuperBlock BB, 100 µl
15500	HBC Streptavidin, 100 µl	Clear, 96-well	SuperBlock BB, 200 µl
15501	HBC Streptavidin, 100 µl	Clear, 8-well strip	SuperBlock BB, 200 µl
15504	HBC Streptavidin, 50 µl	Clear, 384-well	SuperBlock BB, 100 µl
15502	HBC Streptavidin, 100 µl	White, 96-well	SuperBlock BB, 200 µl
15505	HBC Streptavidin, 50 µl	White, 384-well	SuperBlock BB, 100 µl
15503	HBC Streptavidin, 100 µl	Black, 96-well	SuperBlock BB, 200 µl
15506	HBC Streptavidin, 50 µl	Black, 384-well	SuperBlock BB, 100 µl

† BB = Blocking Buffer



# Protein A, G, A/G and L Coated Plates

- · Retain antibody activity, which can be lost when antibodies are immobilized by passive adsorption
- Orient antibodies for maximum antigen binding and immobilize them without prior purification
- More consistent antibody binding ensures minimal variation (< 5% well-to-well)
- Binds up to 2.5 µg antibody/well

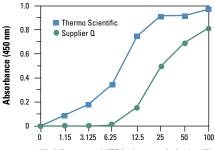
#### **Ordering Information**

Product #	Coating, Coating Volume	Plate Type	Blocking Buffer <sup>+</sup> , Volume
15130	Protein A, 100 μl	Clear, 96-well	SuperBlock BB, 200 µl
15131	Protein G, 100 μl	Clear, 96-well	SuperBlock BB, 200 µl
15138	Protein A/G, 100 μl	Clear, 8-well strip	SuperBlock BB, 200 µl
15190	Protein L, 100 µl	Clear, 96-well	SuperBlock BB, 200 µl
15154	Protein A, 100 μl	White, 96-well	SuperBlock BB, 200 µl
15155	Protein A, 100 μl	Black, 96-well	SuperBlock BB, 200 µl
15156	Protein G, 100 μl	White, 96-well	SuperBlock BB, 200 µl
15157	Protein G, 100 μl	Black, 96-well	SuperBlock BB, 200 µl

† BB = Blocking Buffer

## Nickel Coated Plates

- Detergents used for cell lysis do not inhibit binding to Ni<sup>2+</sup> plates unlike plain polystyrene plates
- · Detection limit of 1 ng of histidine-tagged fusion protein
- Special blocking solution improves signal-to-noise ratio for enhanced sensitivity (Product # 37547)
- Can be custom-made with other metals
- Binding capacity: ~9 pmol His-tagged protein (27 Da)/well



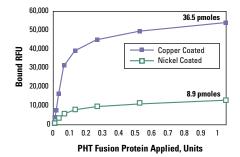
Histidine-tagged ATF fusion protein (ng/well)

#### **Ordering Information**

Product #	Coating, Coating Volume	Plate Type	Blocking Buffer, Volume
15442	Pierce Nickel Chelate, 200 µl	Clear, 96-well	BSA, 200 μl
15142	Pierce Nickel Chelate, 200 µl	Clear, 8-well strip	BSA, 200 μl
15242	Pierce Nickel Chelate, 200 µl	White, 96-well	BSA, 200 μl
15342	Pierce Nickel Chelate, 200 µl	Black, 96-well	BSA, 200 μl
37547	Blocker Metal Chelate Compatible Formulatio	n 200 µl (1,000X)	

# Copper Coated High Binding Capacity (HBC) Plates

- Quantify previously undetectable histidine-tagged proteins
- Wider dynamic range with four-fold greater capacity than regular nickel chelate-coated plates
- Special blocking solution improves signal-to-noise ratio for enhanced sensitivity (Product # 37547)
- Copper chelate provides greater binding capacity than nickel
- Detection limit is 0.1 pg of histine-tagged fusion protein per well



#### **Ordering Information**

Product #	Coating, Coating Volume	Plate Type	Blocking Buffer, Volume
15143	Pierce Copper Chelate, 200 µl	Clear, 96-well	BSA, 200 μl
15146	Pierce Copper Chelate, 200 µl	Clear, 8-well strip	BSA, 200 μΙ
15147	Pierce Copper Chelate, 200 µl	White 96-well	BSA, 200 μΙ
15148	Pierce Copper Chelate, 200 µl	Black 96-well	BSA, 200 μl
37547	Blocker Metal Chelate Compatible Formulati	on 200 µl (1,000X)	



# Thermo Scientific Coated Plates and Custom Coating Service (Cont.)

#### **Capture Antibody Coated Plates**



Thermo Scientific Pierce Plates are ideal for binding assays when available antibodies are in low quantities or denature upon direct adsorption to polystyrene plates. Because these plates are IgG-specific, purified antibodies are not required. Capture Antibody Coated Plates may be used for direct, indirect, competitive or sandwich assays.

- Prevents antibody denaturation as a result of direct binding to polystyrene
- Unlike Protein A or Protein G plates, these plates bind only to target species
- Pre-blocked to reduce nonspecific binding
- Anti-mouse plates: Binding Capacity: ~7 pmol IgG/well
- Anti-rabbit plates: Binding Capacity: ~12 pmol IgG/well

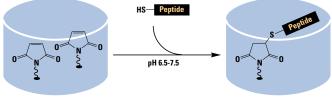
#### **Ordering Information**

Product #	Coating, Coating Volume	Plate Type	Blocking Buffer <sup>*</sup> , Volume
15134	Goat Anti-Mouse IgG Antibody, 100 µl	Clear, 96-well	SuperBlock BB, 200 µl
15234	Goat Anti-Mouse IgG Antibody, 100 µl	White, 96-well	SuperBlock BB, 200 µl
15334	Goat Anti-Mouse IgG Antibody, 100 µl	Black, 96-well	SuperBlock BB, 200 µl
15135	Goat Anti-Rabbit IgG Antibody, 100 µl	Clear, 96-well	SuperBlock BB, 200 µl
15136	Goat Anti-Rabbit IgG Antibody, 100 µl	White, 96-well	SuperBlock BB, 200 µl
15137	Goat Anti-Rabbit IgG Antibody, 100 µl	Black, 96-well	SuperBlock BB, 200 µl

<sup>†</sup>BB = Blocking Buffer

# Maleic Anhydride and Maleimide Activated Plates

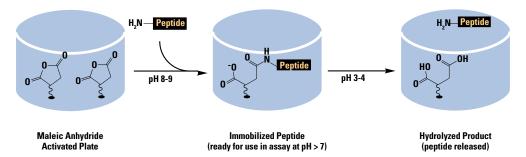
- A direct, simple approach to covalently attach molecules to well surface of microwell plate
- Immobilize compounds, which do not normally adhere to plain polystyrene plates
- Maleic anhydride spontaneously reacts with primary amines
- Activation level: 200  $\mu$ l; Binding capacity: ~125 pmol biotin pentylamine (328 Da)/well
- Maleimides react with sulfhydryl-groups, for easy immobilization of peptides with terminal cysteine and proteins with free sulfhydryl groups.
  - Activation level: 100  $\mu\text{l};$  Binding capacity: 100-150 pmol of sulfhydryl-containing peptide (307 Da)/well



**Maleimide Activated Plate** 

**Immobilized Peptide** 

Reaction scheme for coupling sulfhydryl-containing molecules to Thermo Scientific Sulfhydryl-binding Plates.



Reaction scheme for coupling amine-containing molecules to Thermo Scientific Maleic Anhydride Plates.

Orderin	g Information		
Product #	Coating, Coating Volume	Plate Type	Blocking Buffer, Volume
15110	Maleic Anhydride, 200 µl	Clear, 96-well	
15100	Maleic Anhydride, 200 µl	Clear, 8-well strip	
15108	Maleic Anhydride, 200 µl	White, 96-well	
15150	Maleimide, 200 µl	Clear, 8-well strip	BSA, 200 μΙ
15152	Maleimide, 200 µl	White, 96-well	BSA, 200 μΙ
15153	Maleimide, 200 µl	Black, 96-well	BSA, 200 μΙ



# Thermo Scientific Coated Plates and Custom Coating Service (Cont.)

# **Custom Plate Coating Service**

# The ligand of your choice...the plate of your choice...we'll turn them into the product you want!

We have developed novel chemistries and coatings for a number of applications, and have the capacity to process up to 7,500 microplates per day. Why not put our experience and expertise to work for you and develop the perfect combination of ligand, plate and blocker for your application. We will develop specific quality assurance tests to ensure we can provide the most consistent product to meet your needs and typically provide five test plates before we ship any lot of Thermo Scientific Pierce Custom Coated Plates to you. Get started with as few as 200 x 384-well or 500 x 96-well plates.

Plate Coating Options: Choose any plate, ligand and buffer combination.

Plate Type (96- or 384-well)	Coating Ligand	Blocking Buffer
Your Own Plate	Your Own Ligand	Your Own Blocker
Clear Plates	Antibodies	SuperBlock <sup>®</sup> Blocker
White Plates	Peptides	StartingBlock™Blocker
Black Plates	Fusion Proteins	Protein-free Blocker
Clear Bottom, Black Plates	Metal Chelates	Purified Casein
Clear Bottom, White Plates	<b>Biological Polymers</b>	BSA
Filter Plates	Oligonucleotides	Serum

#### **Custom Microplate Packaging Options**

We can provide the appropriate packaging for your custom plates, based upon your usage. For example, your plates can be packaged for large screening applications (e.g., 25 plates/pack ready for stacking) or for inclusion in a kit for resale (e.g., single-pouch packages).

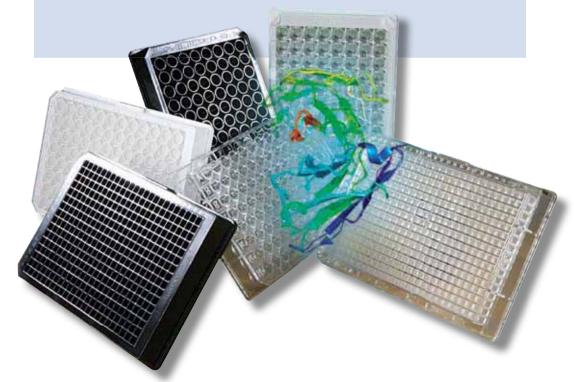
# Partner with us to get the coated plate of your choice!

#### Do you need

- Coated 96- or 384-well plates, slides or other coated surfaces?
- A coated plate using a certain type of plate or a specific supplier's plate?
- A specific surface chemistry that is not included in this catalog?

#### We can help

To learn about our plate-coating service, please contact us at Custom Large Volume & Custom Sales Department at 800-874-3723 or 815-968-0747, extension 300 or visit www.thermo.com/protein-custom. Outside the U.S., contact your local distributor or branch office.





# **Thermo Scientific Blocking Buffers**

# **Blocking Buffers**



Blocking buffers can make a huge difference in your immunoassay ... try them and see!

## StartingBlock Blocking Buffer

- Blocks ELISA plates in seconds
- Compatible with the widest variety of antibodies does not cross-react with rabbit antibodies
- · Serum protein-free and biotin-free

# SuperBlock Blocking Buffer

- · Blocks ELISA plates in two minutes
- · Serum protein-free, biotin-free and phosphoprotein-free
- · SuperBlock blocked plates can be stored dry for up to 12 months
- · SuperBlock in TBS also available in a dry blend format for even better economy and stability

## Pierce Fish Serum Blocking Buffer

- Made from steelhead salmon serum
- · Functions as a universal blocker with minimal cross-reaction to mammalian proteins
- Can be diluted up to 1:10 with buffer

#### Protein-Free Blocking Buffer

- · Protein-free derived from non-animal/plant sources
- · Compatible with ELISAs and arrays and no interference with avidin-biotin systems
- Available with 0.05% Tween®-20 already added

# Blocker Casein Blocking Buffer

- 1% (w/v) ready-to-use solution of Hammarsten Grade Casein with Kathon<sup>™</sup> as preservative, pH 7.4
- Preformulated ready-to-use solution
- An ideal alternative to skim milk
- New Nuclease-free Grade Blocker Casein Blocking Buffer Please inquire for more details

#### Blocker BSA Blocking Buffer

- 10% solution of high-quality bovine serum albumin (BSA), ready-to-use dilute liquid concentrate
- Concentrated formulation saves storage space

#### **Ordering Information**

Product #	Description
37538	StartingBlock PBS Blocking Buffer A protein-based blocker formulation in phosphate buffered saline (pH 7.5) for use in ELISA and Western blotting applications.
37542	StartingBlock TBS Blocking Buffer A protein-based blocker formulation in Tris-buffered saline (pH 7.5) for use in ELISA and Western blotting applications.
37539	StartingBlock T20 (PBS) Blocking Buffer Formulation includes 0.05% Tween-20 Detergent.
37543	StartingBlock T20 (TBS) Blocking Buffer Formulation includes 0.05% Tween-20 Detergent.
37515	SuperBlock Blocking Buffer in PBS
37535	SuperBlock Blocking Buffer in TBS
37516	SuperBlock T20 (PBS) Blocking Buffer
37536	SuperBlock T20 TBS Blocking Buffer
37545	SuperBlock Blocking Buffer (TBS, dry blend) Each pouch yields 200 ml when reconstituted.
37527	Pierce Fish Serum Blocking Buffer (PBS)
37570	Pierce Protein-Free (TBS) Blocking Buffer Proprietary formulation in Tris-buffered saline at pH 7.4 with Kathon Antimicrobial Agent.
37572	Pierce Protein-Free (PBS) Blocking Buffer Proprietary formulation in phosphate-buffered saline at pH 7.4 with Kathon Antimicrobial Agent.
37571	Pierce Protein-Free T20 (TBS) Blocking Buffer Proprietary formulation in Tris-buffered saline at pH 7.4 with 0.05% Tween-20 and Kathon Antimicrobial Agent.
37573	Pierce Protein-Free T20 (PBS) Blocking Buffer Proprietary formulation in phosphate buffered saline at pH 7.4 with 0.05% Tween-20 and Kathon Antimicrobial Agent.
37528	Blocker Casein in PBS 1% (w/v) Casein Hammarsten Grade in PBS, contains Kathon Antimicrobial Reagent as preservative, pH 7.4.
37532	Blocker Casein in TBS 1% (w/v) Casein Hammarsten Grade in TBS, contains Kathon Antimicrobial Reagent as preservative, pH 7.4.
37520	Blocker BSA in TBS (10X)
37525	Blocker BSA in PBS (10X)



# Thermo Scientific Wash Buffers

# Wash Buffers BupH Dry Buffers

The most advanced, versatile, time-saving buffer products available.

- BupH Buffers are protected from contamination and are fresh every time
- · Perform applications with confidence in quality buffers
- "Test-assured" with our commitment to quality management standards
- Making routine buffers is no longer time-consuming
- No component measurement, pH adjustment, quality validation, preparation tracking or refrigeration hassles

## Phosphate Buffered Saline (PBS)

#### Great wash buffer for Western blots!

Each BupH Pack yields 500 ml of 0.1 M phosphate, 0.15 M sodium chloride, pH 7.0 when dissolved in 500 ml deionized water (20 L total). Also available as ready-to-use buffers.

Ordering	Ordering Information			
Product #	Description			
28372	BupH Phosphate Buffered Saline Packs			
28348	20X Phosphate Buffered Saline			
28352	20X PBS Tween-20			

# BupH Tris Buffered Saline (TBS)

#### Great wash buffer for Western blots!

Each pack yields 500 ml of 25 mM Tris, 0.15 M sodium chloride, pH 7.2 when dissolved in 500 ml deionized water (10 pack makes 5 L total; 40 pack makes 20 L total).

#### **Ordering Information**

Product #	Description
28376	BupH Tris Buffered Saline Packs
28379	BupH Tris Buffered Saline Packs
28380	BupH Tris-Glycine Buffer Packs

#### **ELISA Wash Buffer**

#### A wash buffer optimized for use with Thermo Scientific Pierce ELISA Kits.

ELISA Wash Buffer is a Tris-based wash buffer for use in cytokine and other sandwich ELISA procedures. The buffer is the same formulation that is supplied with most Thermo Scientific Pierce ELISA Kits for cytokines and chemokines. The 30X concentrated stock solution is easily diluted 1:30 (vol:vol) in ultrapure water to yield sufficient wash buffer for a typical 96-well microplate ELISA protocol. Supplement an existing ELISA Kit or use as a convenient general purpose wash buffer for customized ELISA methods.

Ordering	Ordering Information				
Product #	Description				
N503	ELISA Wash Buffer (30X)				



# Thermo Scientific Detergents and Stabilizers

# Detergents



Our ultra-pure detergents are excellent tools for keeping proteins in biological samples in solution.

## Surfact-Amps Purified Detergent Solutions

Although detergents are available from several commercial sources and used routinely in many research laboratories, the effects of detergent impurities on methods might not be fully realized. In largescale scientific applications, these detergent impurities could have an even more prominent effect on results, which is why we offer the popular Thermo Scientific Surfact-Amps Purified Detergents in bulk

quantities. Our detergents have the highest purity available today. How do we know? Because our manufacturing team processes the Surfact-Amps Detergents through an additional purification step to remove contaminants that may diminish the detergent's properties or affect protein activity. **Highlights:** 

- · Precise 10% detergent solutions in ultrapure water
- Exceptionally pure less than 1.0 µeq/ml peroxides and carbonyls
- · Excellent for stabilizing proteins in complex biological samples
- Maximum stability and long shelf life packed under inert nitrogen
- Can be added to wash buffers to enhance signal-to-noise ratio

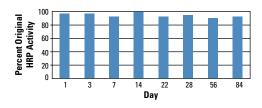
Ordering Information		Ordering Information			
Product # Description		Product # Description			
28320	Surfact-Amps 20 Active Ingredient: Tween-20	28324	Surfact-Amps 40 Active Ingredient: Nonidet P-40		
28314	Surfact-Amps X-100 Active Ingredient: Triton® X-100	28332	Surfact-Amps X-114 Active Ingredient: Triton X-114		
28316	Surfact-Amps 35 Active Ingredient: Brij®-35	28336	Surfact-Amps 58 Active Ingredient: Brij-58		
28328	Surfact-Amps 80 Active Ingredient: Tween-80				

# **Protein Stabilizers**

Our specially formulated stabilizers keep proteins active even at low concentrations.

## Guardian Peroxidase Conjugate Stabilizer/Diluent

- No significant loss of HRP activity over a 6-month period at RT (1:1,000 dilution)
- Store ready-to-use dilutions (1:1,000-1:100,000) that maintain enzyme activity at 4°C
- · Simply add your blocking buffer to create the ideal diluent for your HRP-based ELISA system
- · Compatible to both colorimetric and chemiluminescent substrates



Goat Anti-Rabbit HRP stored at 1/100,000 Dilution in Thermo Scientific Guardian Peroxidase Stabilizer/ Diluent at 37°C. An ELISA assay was performed using Anti-rabbit IgG antibody coated plates (white opaque) blocked with SuperBlock Blocking Buffer (Product # 37535). Goat anti-rabbit HRP that had been stored in Guardian HRP Stabilizer/ Diluent at a 1:100,000 dilution was further diluted to 1:5,000,000 in TBS/ SuperBlock Buffer to perform the stability assay. The conjugate (1:5,000,000) was incubated in each well for one hour at room temperature and then

wells were washed three times with TBS buffer. Bound antibody-HRP conjugate was detected using 100 µl of Thermo Scientific SuperSignal ELISA Femto Substrate (Product # 37075). Storing an antibody-HRP conjugate for 84 days at 37°C is equivalent to storing the conjugate for 24 months at 4°C or nine months at room temperature.

#### **Ordering Information**

Product #	Description
37548	Guardian Peroxidase Conjugate Stabilizer/Diluent
37552	Guardian Peroxidase Conjugate Stabilizer/Diluent

## Protein Stabilizing Cocktail

#### Don't stress out your protein!

The Thermo Scientific Protein Stabilizing Cocktail is a versatile stabilizing solution that increases the shelf-life of purified or partially purified proteins during routine storage. The formulation of low-molecular weight, naturally occurring molecules helps protect proteins from environmental stresses that can otherwise lead to enzyme inactivation, aggregation and freeze-thaw damage.

#### **Highlights**:

 Stabilizes most proteins over buffer alone

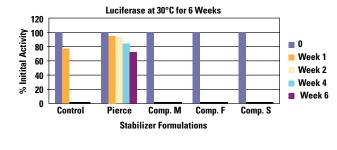
Does not destabilize

biomolecules in downstream assay

- All components are dialyzable
- Easy to pipette (vs. 50% glycerol)

#### **Protein Classes Tested:**

- KinaseLPhosphataseCPeroxidaseARestriction EnzymeA
- Luciferase Cytokine Antibody



Luciferase activity stabilized by Thermo Scientific Protein Stabilizing

**Cocktail.** Commercially available luciferase was stored at 50 µg/ml in Protein Stabilizing Cocktail in a 30°C accelerated stability study. Fluorescence was measured at time 0 (dark bars) and after 1, 2, 4 and 6 weeks of storage. Luciferase stored in Protein Stabilizing Cocktail maintained 85% of its original activity after four weeks compared to a Tris-buffered salt formulation (control) and competitors' stabilizing agents, which were completely inactive after two weeks.

#### **Ordering Information**

Product #	Description
89806	Protein Stabilizing Cocktail 4X Concentrated Solution



Call our Bulk and Custom department at 1-800-874-3723. Outside the United States, contact your local branch or distributor for pricing information.

# **Thermo Scientific Activated Labels**

# DyLight Fluorescent Dyes

The Thermo Scientific DyLight Dyes provide fluorescent intensity equal to or greater than Alexa Fluor<sup>®</sup> or Cy<sup>®</sup>-Dyes in many applications, while maintaining excellent photo-stability and water solubility across a broad range of pH values.

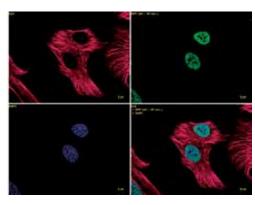
- High percentage activated dye (>80%)
- · High water solubility and excellent photo-stability
- · Available amine- and sulfhydryl-reactive for fast, efficient labeling of IgG or other proteins
- Available for production of conjugates for commercialization (special conditions may apply)
- DyLight Dyes are available pre-conjugated to various IgGs, Streptavidin and NeutrAvidin Protein

Emission	DyLight Dye	Ex/Em*	ε <sup>†</sup>	Spectrally Similar Dyes				
Blue	350	353/432	15,000	AMCA, Alexa Fluor 350 Dye				
Blue	405	400/420	30,000	Alexa Fluor 405 and Cascade Blue® Dyes				
Green	488	493/518	70,000	Alexa Fluor 488, fluorescein and FITC Dyes				
Yellow	549	562/576	150,000	Alexa Fluor 546, Alexa Fluor 555, Cy®3 and TRITC Dyes				
Red	594	593/618	80,000	Alexa Fluor 594 and Texas Red®Dyes				
Red	633	638/658	170,000	Alexa Fluor 633 Dye				
Red	649	654/673	250,000	Alexa Fluor 647 and Cy5 Dyes				
Near-IR	680	692/712	140,000	Alexa Fluor 680 and Cy5.5 Dyes				
Near-IR	750	752/778	220,000	Alexa Fluor 750 and Cy7 Dyes				
Near-IR	800	777/794	270,000	IRDye® 800 Dye				

#### Spectral properties of Thermo Scientific DyLight Fluorescent Dyes.

\* Excitation and emission maxima in nanometers (± 4 nm)

† Molar extinction coefficient (M<sup>-1</sup> cm<sup>-1</sup>)



Thermo Scientific DyLight 488 and DyLight 633 exhibit outstanding fluorescence in structured illumination. The uniform fluorescent intensity throughout the images demonstrates the outstanding brightness and photostability of DyLight 433 and 633. Red: HeLa cell alpha tubulin labelled with monoclonal antibody and visualized using DyLight 633 goat antimouse IgG (highly crossadsorbed). Green: Histone H4 labeled with monoclonal antibody and visualized using DyLight 488 goat anti-rabbit IgG (highly cross-adsorbed). Blue: Nucleus counterstained with fluorescent mounting media containing DAPI. Images were acquired with the Axio Imager<sup>™</sup>. Z1 and ApoTome<sup>™</sup> Slider (Zeiss<sup>®</sup> MicroImaging, Inc). The ApoTome Module provides confocal-like resolution allowing optical sectioning without the use of a pinhole (e.g., confocal). No image enhancement was performed.

# **Ordering Information**

Product #	Description	Product #	Description	
Amine-Reactive Dyes		Sulfhydryl	Sulfhydryl-Reactive Dyes	
46426	DyLight 350 NHS Ester	46622	DyLight 350 Maleimide	
46400	DyLight 405 NHS Ester	46600	DyLight 405 Maleimide	
46402	DyLight 488 NHS Ester	46602	DyLight 488 Maleimide	
46407	DyLight 549 NHS Ester	46607	DyLight 549 Maleimide	
46412	DyLight 594 NHS Ester	46608	DyLight 594 Maleimide	
46414	DyLight 633 NHS Ester	46613	DyLight 633 Maleimide	
46415	DyLight 649 NHS Ester	46615	DyLight 649 Maleimide	
46418	DyLight 680 NHS Ester	46618	DyLight 680 Maleimide	
53068	DyLight 680B NHS Ester	46670	DyLight 680B Maleimide	
46420	DyLight 750 NHS Ester	46619	DyLight 750 Maleimide	
46421	DyLight 800 NHS Ester	46621	DyLight 800 Maleimide	

# **DyLight Conjugates**

Excellent brightness make these conjugates a clear alternative.

- Available conjugated to commonly used secondary antibodies, Streptavidin and NeutrAvidin Biotin-Binding Protein
- Molar ratio (dye:protein) optimized to provide excellent fluorescent intensity
- Stable for 1 year at 4°C
- · Antibody conjugates are affinity-purified to minimize cross-reactivity

#### **Ordering Information**

Description	Product #				
	DyLight 350 Dye	DyLight 405 Dye	DyLight 488 Dye	DyLight 549 Dye	DyLight 594 Dye
Goat Anti-Mouse IgG (H+L)			35502	35507	
Goat Anti-Mouse IgG Highly Cross-Adsorbed	62273	35500	35503	35508	35511
Goat Anti-Rabbit IgG (H+L)			35552	35557	
Goat Anti-Rabbit IgG Highly Cross-Adsorbed	62272	35550	35553	35558	35561
Streptavidin			21832	21837	
NeutrAvidin Biotin-Binding Protein			22832	22837	
	DyLight 633 Dye	DyLight 649 Dye	DyLight 680 Dye	DyLight 750 Dye	DyLight 800 Dye
Goat Anti-Mouse IgG (H+L)		35515	35518		35521
Goat Anti-Mouse IgG Highly Cross-Adsorbed	35513	35516	35519		
Goat Anti-Rabbit IgG (H+L)		35565	35568		35571
Goat Anti-Rabbit IgG Highly Cross-Adsorbed	35563	35566	35569	35572	
Streptavidin		21845	21848		21851
NeutrAvidin Biotin-Binding Protein		22845	22848		22853



# Thermo Scientific Activated Labels (Cont.)

# Horseradish Peroxidase and Alkaline Phosphatase Conjugates

We offer both Horseradish Peroxidase (HRP) and Alkaline Phosphatase (AP) in various formats.

- Enzyme conjugates: HRP and AP coupled to Streptavidin, NeutrAvidin Protein and commonly used secondary antibodies
- Activated enzymes: pre-activated HRP and AP to easily produce your own conjugates via  $\mbox{-}NH_2$  or -SH groups
- Pure enzymes: HRP and AP to give you most flexibility

#### **Ordering Information**

Product #	Description			
31487	EZ-Link Plus Activated HRP (-NH <sub>2</sub> -reactive)			
31485	EZ-Link Maleimide activated HRP (-SH-reactive)			
31001	NeutrAvidin HRP Conjugated			
21132	High Sensitivity Streptavidin-HRP Concentration: 1 mg/ml			
21134	High Sensitivity Streptavidin-HRP Concentration: 10 µg/ml			
31491	Horseradish Peroxidase			
31002	NeutrAvidin AP Conjugated			
31391	Alkaline Phosphatase Calf intestinal. Supplied in Tris buffer, pH ~7.0.			
31392	Alkaline Phosphatase			
21323	Streptavidin, AP Conjugated			
21324	Streptavidin, AP Conjugated			
31490	Horseradish Peroxidase			

# **Biotinylation Reagents**

Label almost anything with biotin using one of our many high-quality biotinylation reagents.

Whether you are an expert or are trying biotinylation for the first time, Thermo Scientific EZ-Link Reagents and Kits make biotinylation easy. Our customers depend on our consistent lot-to-lot quality for reproducible results. We offer complete EZ-Link® Biotinylation Kits with buffers, fast and efficient spin desalting columns and HABA detection reagent to determine the number of biotin residues attached to your protein.

Choose a Biotinylation Reagent which will react with the functional groups present on your target. We offer Biotinylation Reagents which conjugate to various chemical groups, including primary amines  $(-NH_2)$  and reduced sulfhydryls (see Selection Guide).

#### **Biotinylation Reagent Selection Guide.**

21335* 21338 21217* 21331* 21442	Sulfo-NHS-LC Biotin Sulfo-NHS-LC-LC-Biotin	Primary Amine				Permeable
21217* 21331*	Sulfo-NHS-LC-LC-Biotin		Yes	22.4 Å	No	No
21331*		Primary Amine	Yes	30.5 Å	No	No
	Sulfo-NHS-Biotin	Primary Amine	Yes	13.5 Å	No	No
21//2	Sulfo-NHS-SS-Biotin	Primary Amine	Yes	24.3 Å	Yes	No
21772	NHS-SS-PEG <sub>4</sub> -Biotin	Primary Amine	Yes	37.9 Å	Yes	No
21362*	NHS-PEG <sub>4</sub> -Biotin	Primary Amine	Yes	29 Å	No	No
21312*	NHS-PEG <sub>12</sub> -Biotin	Primary Amine	Yes	56.0 Å	No	No
21303	TFA-PEG <sub>3</sub> -Biotin	Primary Amine	Yes	33.4 Å	No	No
21336	NHS-LC-Biotin	Primary Amine	No	22.4 Å	No	Yes
21343	NHS-LC-LC-Biotin	Primary Amine	No	30.5 Å	No	Yes
20217	NHS-Biotin	Primary Amine	No	13.5 Å	No	Yes
21441	NHS-SS-Biotin	Primary Amine	No	24.3 Å	Yes	Yes
21325*	NHS-Chromogenic-Biotin	Primary Amine	No	41.0 Å	No	No
21117	NHS-Iminobiotin TFA	Primary Amine	No	13.5 Å	No	Yes
21218	PFP-Biotin	Primary or Secondary Amine/RNA/DNA	No	9.6 Å	No	Yes
21219	TFP-PEG <sub>3</sub> -Biotin	Primary Amine	Yes	32.6 Å	No	No
21901*	Maleimide-PEG <sub>2</sub> -Biotin	Sulfhydryl	Yes	29.1 Å	No	No
21911	Maleimide-PEG <sub>11</sub> -Biotin	Sulfhydryl	Yes	59.1 Å	No	No
21900	Biotin-BMCC	Sulfhydryl	No	32.6 Å	No	Yes
21333	Iodoacetyl-PEG2-Biotin	Sulfhydryl	No	27.1 Å	No	Yes
21334	PEG-lodoacetyl-Biotin	Sulfhydryl	Yes	24.7 Å	No	No
21341	Biotin-HPDP	Sulfhydryl	No	29.2 Å	Yes	Yes
21346	Amine-PEG <sub>2</sub> -Biotin	Carboxyl⁺	Yes	20.4 Å	No	No
21347	Amine-PEG <sub>3</sub> -Biotin	Carboxyl <sup>‡</sup>	Yes	22.9 Å	No	No
21345	Pentylamine-Biotin	Carboxyl <sup>±</sup>	Yes	18.9 Å	No	No
28020	Biocytin Hydrazide	Carbohydrate/RNA/DNA	Yes	19.7 Å	No	No
21339	Biotin Hydrazide	Carbohydrate	No	15.7 Å	No	Yes
21340	Biotin-LC-Hydrazide	Carbohydrate	No	24.7 Å	No	Yes
21360	Biotin-PEG₄-Hydrazide	Carbohydrate	Yes	31.3 Å	No	No
29986	Psoralen-PEG₃-Biotin	DNA/RNA Protein	Yes	36.9 Å	No	No
22020	PEG₅-Biotin Dimer	Avidin Cross-linking	Yes	43.4 Å	No	No
29987	Photoactivatable Biotin	DNA/RNA Protein	No	30.0 Å	No	Yes
29982	Biotin-LC-ASA	DNA/RNA Protein	No	29.9 Å	No	Yes
28022	Biocytin	Hydrazide	Yes	20.1 Å	No	No
33033*	Sulfo-SBED	Trifunctional	Yes	N/A	Yes	No
33083	Mts-Atf-LC-Biotin	Trifunctional	Yes	N/A	Yes	No

\*Other product numbers (sizes and/or kits) also available; visit www.thermo.com/pierce for a complete listing. †Membrane permeability is implied due to a molecule's hydrophobic/hydrophilic nature.

#When used with EDC (Product # 22980, 22981).

# Thermo Scientific ELISA Substrates

We offer a high-quality line of substrates for horseradish peroxidase (HRP) and alkaline phosphatase (AP) depending upon the instrumentation available and the required sensitivity.

#### **Characteristics of Various Detection Methods and Substrates.**

	<b>Colorimetric Substrates</b>	Chemifluorescent Substrates	Chemiluminescent Substrates
ELISA	<ul> <li>Medium/low sensitivity</li> </ul>	<ul> <li>High sensitivity</li> </ul>	<ul> <li>High sensitivity</li> </ul>
	<ul> <li>Many substrates available</li> </ul>	<ul> <li>Few substrates available</li> </ul>	<ul> <li>Few substrates available</li> </ul>
	<ul> <li>Slow signal generation</li> </ul>	<ul> <li>Rapid signal generation</li> </ul>	<ul> <li>Rapid signal generation</li> </ul>
	<ul> <li>Enzyme catalyzed quickly</li> </ul>	<ul> <li>Enzyme activity maintained</li> </ul>	<ul> <li>Enzyme catalyzed quickly</li> </ul>
	<ul> <li>Small linear range</li> </ul>	<ul> <li>Large linear range</li> </ul>	<ul> <li>Large linear range</li> </ul>
	<ul> <li>Poor low-end linearity</li> </ul>	<ul> <li>Enhanced low-end linearity</li> </ul>	• Enhanced low-end linearity
	• Flexible (stopped, kinetic assays)	• Flexible (stopped, kinetic assays)	Non-flexible
Detection	• BioMate	<ul> <li>Multiskan and Varioskan</li> </ul>	• Fluoroskan
	Spectrophotometer	Fluorometer	Luminometer

Note: For more information on instrumentation visit: www.thermo-reading-room.com

#### **Colorimetric ELISA Substrates for Alkaline Phosphatase (AP) and Horseradish Peroxidase (HRP).** Substrates for use with an absorbance plate reader listed in order of increasing sensitivity.

Enzyme	Product	Absorbance and Color	Detection Limit'	Primary (1°) and Secondary (2°) Antibody Dilutions'
АР	PNPP Substrate 1-Step Solution (37621) Tablet Kit (37620) Tablets (34047) Powder (34045)	405 nm Yellow	~10 ng/well (100 ng/ml)	1° 1:500 2° 1:5K - 1:20K
HRP	<b>ABTS Substrate</b> 1-Step Solution (37615) Tablets (34026)	410 nm (650 nm) Green	~250 pg/well (2.5 ng/ml)	1° 1:1K 2° 1:5K - 1:50K
HRP	<b>OPD Substrate</b> Powder (34005) Tablets (34006)	490 nm (450 nm) Green (Orange)	~7 pg/well (70 pg/ml)	1° 1:1K 2° 1:5K - 1:50K
HRP	<b>Slow TMB</b>	450 nm (652 nm)	~8 pg/well	1° 1:1K
	1-Step Solution (34024)	Yellow (Blue)	(80 pg/ml)	2° 1:5K - 1:50K
HRP	<b>Turbo TMB</b>	450 nm (652 nm)	~7 pg/well	1° 1:1K
	1-Step Solution (34022)	Yellow (Blue)	(70 pg/ml)	2° 1:5K - 1:50K
HRP	<b>TMB Substrate</b>	450 nm (652 nm)	~6 pg/well	1° 1:1K
	2-Part Kit (34021)	Yellow (Blue)	(60 pg/ml)	2° 1:5K - 1:50K
HRP	<b>Ultra TMB</b>	450 nm (650 nm)	~2 pg/well	1° 1:1K
	1-Step Solution (34028)	Yellow (Blue)	(20 pg/ml)	2° 1:5K - 1:50K

<sup>1</sup> Detection limits and recommended antibody dilutions (based on 1 mg/ml stock) have been generalized as a means to begin optimization. Individual assays may require conditions outside the ranges suggested here.

#### Chemiluminescent ELISA Substrates for Horseradish Peroxidase (HRP).

Substrates for use with a luminometer or other plate reader capable of measuring total luminescence without the use of filters. Excitation wavelength listed in order of increasing sensitivity.

Enzyme	Product	Emax² Color	Detection Limit <sup>1</sup>	Primary (1°) and Secondary (2°) Antibody Dilutions¹
HRP	SuperSignal ELISA Pico (37070, 37069)	425 nm Blue/Green	~500 fg/well (5 pg/ml)	1° 1:1K 2° 1:10K - 1:50K
HRP	SuperSignal ELISA Femto (37075, 37074)	425 nm Blue/Green	~170 fg/well (1.7 pg/ml)	1° 1:1K 2° 1:50K - 1:100K

<sup>1</sup> Detection limits and recommended antibody dilutions (based on 1 mg/ml stock) have been generalized as a means to begin optimization. Individual assays may require conditions outside the ranges suggested here.
<sup>2</sup> The peak emission wavelength is given for reference. However, for best sensitivity, measure total light output using a luminometer.

#### Chemifluorescent ELISA Substrates for Horseradish Peroxidase (HRP).

Substrates for use with a fluorescent plate reader listed in order of increasing sensitivity.

Enzyme	Product	Emax / Amax (Emisson/Excitation)	Detection Limit <sup>1</sup>	Primary (1°) and Secondary (2°) Antibody Dilutions¹
HRP	<b>QuantaBlu Fluorogenic Substrate</b> (15169)	420 nm/325 nm	~500 fg/well (5 pg/ml)	1° 1:500 2° 1:5K - 1:20K
HRP	QuantaBlu Kinetic Fluorogenic Substrate (15162)	420 nm/325 nm	~500 fg/well (5 pg/ml)	1° 1:500 2° 1:5K - 1:20K
HRP	QuantaRed Enhanced Chemifluorescent Substrate (15159)	585 nm/570 nm	~400 fg/well (4 pg/ml)	1° 1:1K 2° 1:5K - 1:20K

<sup>1</sup> Detection limits and recommended antibody dilutions (based on 1 mg/ml stock) have been generalized as a means to begin optimization. Individual assays may require conditions outside the ranges suggested here.



# Chemiluminescent Substrates for HRP SuperSignal ELISA Femto Maximum Sensitivity Substrate

SuperSignal ELISA Femto Substrate utilizes a new enhancer formulation for superior protein detection and low-end linearity in ELISA applications. SuperSignal ELISA Femto Substrate generates detectable light within one minute of addition to trace amounts of soluble HRP, saving up to 30 minutes per assay and making it an ideal substrate for high throughput screening (HTS) and for ELISAs that need elevated sensitivity.

- Intense signal generated (425 nm) immediately at both room temperature and 37°C
- Detect low level of protein with high signal:noise ratios and low-end linearity of dose-response curves
- Sensitivity: 0.17 pg/well
- Storage for 6 months at RT or > 12 months at 4°C with a 6-hour working solution stability

Product #	Description
37074	SuperSignal ELISA Femto Chemiluminescent Substrate Kit includes: Lummol/Enhancer Solution Stable Peroxide Buffer
37075	SuperSignal ELISA Femto Maximum Sensitivity Substrate Kit includes: Lummol/Enhancer Solution Stable Peroxide Solution

# SuperSignal ELISA Pico Substrate

SuperSignal ELISA Pico Substrate is optimized for luminometer-based assays to generate an intense signal and combines a high sensitivity with an economical price.

- Intense signal generated (425 nm) immediately at both room temperature and 37°C
- Detect low picogram quantities of protein
- Sensitivity: 0.5 pg/well
- · Storage for 12 months at RT with an 8-hour working solution stability

#### **Ordering Information**

Product #	Description
37069	SuperSignal ELISA Pico Chemiluminescent Substrate Kit includes: Luminol/Enhancer Solution Stable Peroxide Buffer
37070	SuperSignal ELISA Pico Chemiluminescent Substrate Kit includes: Luminol/Enhancer Solution Stable Peroxide Buffer

# Chemifluorescent Substrates for HRP QuantaRed Enhanced Substrate

- · Sensitive low picogram to femtogram detection
- · Red-Shifted minimal autofluorescence interference from biological samples
- · Convenient compatible with existing filter sets, no need to purchase special filter sets
- · Complete mix and use reagents, no buffers to prepare or reagents to dissolve
- Flexible use Stop Solution to effectively stop the reaction resulting in stable signal for at least 4 hours or more.
- Versatile produces a strong colorimetric signal and can be read fluorescently or colorimetrically at 570 nm

Ordering Information		
Product #	Description	
15159	QuantaRed Enhanced Chemifluorescent HRP Substrate	
	Sufficient reagents to perform 10 x 96-well assays	
	Kit includes: QuantaRed ADHP Concentrate	
	QuantaRed Enhancer Solution	
	QuantaRed Stable Peroxide Solution	
	QuantaRed Stop Solution	

# QuantaBlu Fluorogenic Peroxidase Substrate

- Flexible stopped, non-stopped or kinetic assays possible
- Large dynamic range (4 log HRP concentration range) making it ideal for HTS applications
- Flat baseline in assays which facilitates low-level detection sensitivity (0.5 pg/well)
- · Working solution is stable for 24 hours
- Large stokes shift ext/em maxima of 325/420 nm (range ext/em of 315-345 / 370-460 nm)
- Does not photobleach and allows for variable incubation times of 1 to 90 minutes at RT or 37°C

#### **Ordering Information**

Product #	Description
15169	QuantaBlu Fluorogenic Peroxidase Substrate Kit includes: QuantaBlu Substrate QuantaBlu Stable Peroxide Solution QuantaBlu Stop Solution

For more information on SuperSignal West Substrates for your Western blotting needs, see www.thermo.com/pierce

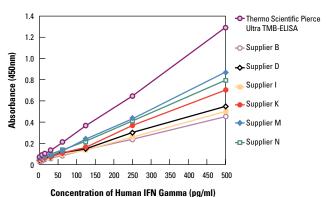


# Thermo Scientific ELISA Substrates (Cont.)

# Colorimetric Substrates for HRP TMB Substrate



- Various sensitivities to suit any assay
- •1-Step<sup>™</sup> TMB substrates are ready-to-use, single component without DMF or DMSO present in the reagent
- Absorbance read at 450 nm (stopped) or 652 nm (non-stopped)
- 1-Step Ultra TMB offers highest sensitivity followed by 1-Step Turbo TMB and 1-Step slow TMB



#### **Ordering Information**

	-
Product #	Description
34028	1-Step Ultra TMB-ELISA
34021	TMB Substrate Kit
	Kit includes: Peroxidase Substrate
	Peroxide Solution (H <sub>2</sub> O <sub>2</sub> )
34022	1-Step Turbo TMB
34024	1-Step Slow TMB

# Colorimetric Substrates for AP 1-Step PNPP Substrate

- Ready-to-use, single component which is stable for at least 12 months
- · Sensitivity: 10 ng/well
- Minimizes risk of variation due to the dissolving step of powder or tablet formats
- Absorbance read at 405 nm

#### **Ordering Information**

Product #	Description
37621	1-Step PNPP
37620	Phosphatase Substrate Kit Kit includes: Diethanolamine Buffer PNPP Tablets (5 mg/tablet)
34047	PNPP Tablets
34045	PNPP



# Thermo Scientific ELISA Accessories

## Accessories Reagent Reservoirs



Allows easy dispensing of reagents by multi-channel pipettors.

Reservoirs facilitate repeated multi-channel pipetting for reagent delivery to microplates. Thermo Scientific Reagent Reservoirs are sterile, sturdy, disposable and molded from high-impact polystyrene.

Orderin	Ordering Information	
Product #	Description	
15075	Reagent Reservoirs Sterile, 50 ml capacity	

# Sealing Tape for 96-Well Plates

These are pre-cut, pressure-sensitive sealing tape sheets for standard size microplates. Seal plates quickly and easily to allow mixing or prevent evaporation during assay incubation step.

Orderin	Ordering Information	
Product #	Description	
15036	Sealing Tape for 96-Well Plates	

#### 96-Well Plates



#### Enhance antibody-binding properties in your ELISA applications.

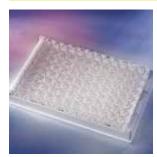
Thermo Scientific Pierce 96-Well Microplates are made of specially formulated polystyrene and treated to produce high-capacity antibody-binding characteristics.

**Characteristics:** 

- Antibody Binding: High, 400 ng IgG/cm<sup>2</sup> (1 cm<sup>2</sup> = 100 μl vol.)
- Binding Interaction: Hydrophobic/Ionic
- Performance Certification: Well-to-Well,  $CV \approx 3\%$
- Well Shape (bottom): Flat
- Maximum Well Volume: 360 µl
- Packaging: 1 plate per sealed tray

Orderin	Ordering Information	
Product #	Description	
15041	Pierce 96-Well Plates – Corner Notch	
15042	Pierce White Opaque 96-Well Plates	

#### 8-Well Strip Plates



#### No more loose-fitting strips!

Thermo Scientific Pierce 8-Well Strip Plates are optically clear, polystyrene plates that have a standard 96-well microplate footprint but also allow individual 8-well strips (i.e., plate columns) to be removed from the rigid frame.

#### **Characteristics:**

- Antibody Binding: High, 400 ng IgG/cm<sup>2</sup> (1 cm<sup>2</sup> = 100 μl vol.)
- **Binding Interaction:** Hydrophobic/Ionic
- Performance Certification: Well-to-Well, CV  $\approx 3\%$
- Well Shape (bottom): Flat
- Maximum Well Volume: 360 µl
- Packaging: 5 plates per sealed tray

Orderin	ng Information
Product #	Description
15031	Pierce 8-Well Strip Plates – Corner Notch Includes one Strip Well Ejector per package.
15033	Pierce Strip Well Ejector

#### Cannot find your product of interest in this brochure? Please contact us to see what we can do for you.



# **Thermo Scientific Pierce Antibodies**



#### Antibodies

Over 30,000 antibodies in 42 research areas.

Thermo Scientific Pierce Antibodies are developed for a wide variety of application needs. Our website enables you to easily search by protein target and then filter by the specific assays you are interested in. All of our antibodies are validated in the stated applications and are guaranteed to perform.

## Applications

- Agglutination
- Competition Assay
- ChIP Assay
- Cytotoxicity Assay
- Control
- ELISA
- Electron Microscopy
- FACS
- Functional Assay

- Gel Shift
- Hemagglutination Assay
- Inhibition Assay
- Immunocytochemistry
- Immunodiffusion
- Immunofluorescence
- Immunohistochemistry
- Immunohistochemistry (Frozen)
- Immunohistochemistry (Paraffin)
- Immunohistochemistry (Paraffin, Frozen)
- Infection
- Immunoprecipitation
- Immunoradiometric Assay
- Radioimmune Assay
- Western Blot



## **Custom Antibody Services**

#### Design and produce better custom antibodies.

The Thermo Scientific Open Biosystems Custom Antibody Development Service leverages our experience in making more than 18,500 antibodies to peptides and recombinant proteins. Our proprietary antigen design tools, including the Thermo Scientific Antigen Profiler Software (below), and targeted antigen display produces more robust antibodies that perform better in your targeted assays.

When you initiate a custom antibody project with us we provide you access to our online project management tool. This secure account gives you easy access to project information and allows you to provide specific instructions for your projects.

#### **Custom Antibody Options**

	Recombinant Protein Polyclonal	Anti-Peptide Polyclonal	Monospecific Polyclonal	Phospho-Specific Polyclonal	Anti-Peptide Monoclonal	Recombinant Protein Monoclonal
Advanced Antigen Design with Antigen Profiler™Software	~	~	~	~	~	~
Peptide Synthesis	NA	~	~	~	~	NA
Depleting Peptide or Control Peptide	NA	NA	~	~	Optional	NA
Protein Expression	Optional	NA	NA	NA	NA	~
Animal Immunization Protocol	~	~	~	~	~	~
ELISA Titration	~	~	~	~	~	~
Affinity Purification and Depletion	Optional	Optional	~	~	NA	NA
Fusions and Cloning	NA	NA	NA	NA	~	~
Monoclonal Production and Purification	NA	NA	NA	NA	Optional	Optional
Complete Online Project Tracking	~	~	~	~	~	~

# For more information on Thermo Scientific Open Biosystems Custom Antibody Services, please visit www.thermo.com/openbio.

OPEne Antigen Profiler	Thermo Scie Profiler Softw the tools to d
Caston Antigen Information Designed for Con-	better antibo
Accession: Criteri Begumen: Levyls 822 area anto. Gene Devide: 10790.	The online so
Proble Name: 5557/MT (grewh tetres woopting preservor Target Special: Hono separat (Furner)	
Protein Sequence and Features	to examine c
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#### Thermo Scientific Antigen Profiler Software provides the tools to develop better antibodies.

he online software allows you o examine comparative intigenicity based on *in vivo* iter data from over 13,000 peptide antibodies and to dentify important structural notifs to produce high pecificity antibodies. The software also includes of peptide tutorial to aid in synthesizing soluble peptides ind curated BLAST analysis for pecificity determination. A sample report is shown here.

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Example of online project tool.



# ecommended Reading



# Assay Development Technical Handbook

Our 74-page Assay Technical Handbook is an essential resource for any laboratory using enzyme-linked immunosorbent assay (ELISA) and related plate-based assay methods. The handbook describes the essential techniques and tools for designing and optimizing ELISA and ELISPOT Assays. Featured products include coated microplates, standards, blockers, buffers, probe-labeling reagents, secondary antibodies and detection substrates.



# **Antibody Production Technical Handbook**

This 69-page Antibody Technical Handbook is an essential resource for any laboratory working with antibodies. The handbook provides an overview of antibody structure and types, as well as technical information on the procedures, reagents and tools used to produce, purify, fragment and label antibodies.



# **Fluorescent Products Guide**

This handbook features Thermo Scientific DyLight Dyes and Conjugates, Dye Removal Columns, Antibody Labeling Kits, Western Blotting Kits, and MW Markers, including the new DyLight 350 products.



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t US Patent Pending on DyLight 488 Technology. High-Capacity Coated Plate Technology is protected by US Patent 6,638,728. NHS Ester Technology is protected by US Patents 5,872,261; 5,892,057; 5,942,628; and 6,407,263. QuantaBlu Technology is protected by US Patents 6,437,179 and 6,040,150. SuperSignal Technology is protected by US Patent 6,432,662.

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