

Cellular imaging

Your guide to culturing, imaging, and everything in between

Grow cells

Gibco[™] cell culture media and reagents

- Designed to support the growth and maintenance of a variety of mammalian cells and cell lines
- Ready-to-use media products and powdered and concentrated liquid formulations

Learn more at thermofisher.com/media

Gibco[™] FBS

• Helps provide cell health, maintenance, and viability crucial for optimal performance and cell growth in your cell culture medium

Learn more at thermofisher.com/fbs

Gibco[™] PeproTech[™] cytokines and growth factors

- · Portfolio of more than 700 bioactive recombinant proteins
- Exceptional performance with high bioactivity, carrier-free formats, and lot-to-lot and grade-to-grade consistency
- Three manufacturing grades (research use (RUO), animal free (AF), and GMP) and multiple vial sizes available

Learn more at thermofisher.com/recombinantproteins

Media, plastics, and sera.



PeproTech cytokines and growth factors.

Fix, permeabilize, and block

Invitrogen[™] Image-iT[™] Fixation/Permeabilization Kit

- Enables cell sample labeling via fixing and permeabilizing structures
- Allows precise targeting by antibodies and fluorescent stains

Learn more at thermofisher.com/image-it

Invitrogen[™] BlockAid[™] Blocking Solution

- Helps enhance signal-to-noise ratio by preventing nonspecific binding of fluorescent labels
- · Offers superior background reduction compared to traditional blocking solutions

Learn more at thermofisher.com/blockaid



BPAE cells were fixed and permeabilized using the Image-iT Fixation/Permeabilization Kit (Cat. No. R37602) and stained with Invitrogen[™] Alexa Fluor[™] 647 dye (Cat. No. C10340).

Label and stain

Invitrogen[™] primary antibodies

- Antibodies for cancer, signaling, neurobiology, stem cell, and immunology targets
- · Engineered recombinant antibodies for superior target specificity
- · Antibodies for epitope tags, fusion proteins, dyes, and haptens
- Advance-verified antibodies specifically validated* in immunohistochemistry (IHC) and immunocytochemistry (ICC)

Learn more at thermofisher.com/antibodies

Invitrogen[™] cell structure stains

- · Confirm the subcellular localization of a protein
- Identify the mitochondria, nuclei, ER, golgi, cytoplasm, and plasma membrane

Learn more at thermofisher.com/cellstructure

Invitrogen[™] Image-iT[™] cell painting kits

- Designed for cellular-component painting to assess cell health and cytotoxicity
- Optimized format for high-content screening (HCS) instruments, such as Thermo Scientific[™] CellInsight[™] platforms, to provide a phenotypical readout of cell status

Learn more at thermofisher.com/cellpaintingassay

Invitrogen[™] antibody labeling kits

- · Optimized protocols for convenient and reliable antibody conjugation
- Fast and easy conjugation with Invitrogen[™] Zenon[™] antibody labeling kits or Invitrogen[™] Zip Alexa Fluor[™] Rapid Antibody Labeling Kits
- Site-specific labeling with Invitrogen[™] SiteClick[™] Antibody Labeling Kits
- Conveniently label in the presence of stabilizers with Invitrogen[™] ReadyLabel[™]
 Antibody Labeling Kits

Learn more at thermofisher.com/labelingkits

Invitrogen[™] custom conjugation services

- Expert antibody or protein conjugation with your choice of label and labeling chemistry
- New conjugate options include bispecific antibodies, oligonucleotides, and antibody drug conjugates
- Offers a range of labels, including fluorescent dyes, phycobiliproteins, and enzymes

* The use or any variation of the word "validation" refers only to research-use antibodies that were subject to functional testing to confirm that the

• Available for both research and commercial purposes

Learn more at thermofisher.com/customconjugation



Squamous cell carcinoma tissue section stained with Invitrogen[™] Pan Cytokeratin Monoclonal Antibody (AE1/AE3) and Invitrogen[™] eBioscience[™] Phalloidin eFluor[™] 660 (Cat. No. 50-9003-82). Nuclei were stained with Invitrogen[™] DAPI (Cat. No. D1306).



Fluorescent overlays of morphological cellular profiling with Image-iT cell painting kit on U-2OS cells, imaged on the Thermo Scientific[™] CellInsight[™] CX7 LXR Pro High-Content Analysis Platform.



Formalin-fixed paraffin-embedded (FFPE) human colon tissue stained with Invitrogen[™] ReadyLabel[™] AlexaFluor[™] Antibody Labeling Kits and imaged on the Invitrogen[™] EVOS[™] M7000 Imaging System.

antibody can be used with the research techniques indicated. It does not ensure that the product(s) was validated for clinical or diagnostic uses.

Detect

Invitrogen[™] Alexa Fluor[™] secondary antibodies

- A portfolio of 18 dyes with a variety of host and target species
- Excellent multiplexing abilities with the widest dye selection among Alexa Fluor antibody vendors
- Optimized to provide outstanding and consistent results over time

Learn more at thermofisher.com/alexafluor

Invitrogen[™] Alexa Fluor[™] Plus secondary antibodies

- A portfolio of seven dyes with a variety of host and target species
- Higher signal-to-noise ratio-up to 4.2 times higher-than traditional Alexa Fluor dyes
- · Increased sensitivity with more efficient binding for low-abundance targets

Learn more at thermofisher.com/alexafluorplus

Invitrogen[™] HRP secondary antibodies

- A portfolio of 295 HRP secondary antibodies
- 17 target species and 7 host species available
- Supports 10 applications

Learn more at thermofisher.com/hrp

Invitrogen[™] Tyramide SuperBoost[™] kits

- Detect low abundance protein
- 10–200 times the sensitivity of standard ICC, IHC, and *in situ* hybridization (ISH) methods
- Exceptional signal amplification, definition, and clarity

Learn more at thermofisher.com/superboost

Protect and enhance

Invitrogen[™] ProLong[™] Glass Antifade Mountant

- Helps inhibit photobleaching across the spectrum, even after prolonged storage
- Low background across the spectrum
- Hard-setting mountant
- Available with or without DAPI

Learn more at thermofisher.com/antifade



Invitrogen[™] Alexa Fluor[™] Plus 555 secondary antibody in rat intestine.



Invitrogen[™] goat anti-mouse HRP secondary antibody in paraffin-embedded human colon.



Rat intestinal sections (FFPE) were sequentially immunolabeled with three primary antibodies against H2B, actin, and Ki-67. The samples were then labeled with specific Tyramide SuperBoost kits to detect each antibody.

Image

Invitrogen[™] EVOS[™] Imaging Systems

- High-resolution cameras, controlled LED lights, and intuitive stage-tracking software effortlessly create stunning images
- · Live-cell imaging and advanced analysis options for publication-quality results

Learn more at thermofisher.com/evos

Thermo Scientific[™] CellInsight[™] high-content screening/analysis (HCS/HCA) platforms

- Unbiased single-cell analysis from monolayers to spheroids with laser/LED options and up to seven illumination channels
- Support various bioapplications like cell painting, utilizing Thermo Scientific[™] Amira[™] Software for 3D analysis
- Equipped with accessories for high-throughput automation, enabling fast time-to-data acquisition

Learn more at thermofisher.com/hcs



EVOS M7000 Imaging System.



Thermo Scientific[™] CellInsight[™] CX7 LZR Pro High-Content Analysis Platform.

Cell imaging resources



Imaging protocol handbook.





Invitrogen[™] Stain-iT[™] Cell Staining Simulator.





Fluorescence SpectraViewer tool.





Learn more at thermofisher.com/cellularimaging

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