Accessory Products

A wide variety of pre-cast gels, buffers, protein stains and standards are available separately from Life Technologies for electrophoresis, blotting and protein analysis.

For details, visit www.lifetechnologies.com.

Limited Use Label License: Research Use Only

The purchase of this product conveys to the purchaser the limited, non-transferable right to use the purchased amount of the product only to perform internal research for the sole benefit of the purchaser. No right to resell this product or any of its components is conveyed expressly, by implication, or by estoppel. This product is for internal research purposes only and is not for use in commercial applications of any kind, including, without limitation, quality control and commercial services such as reporting the results of purchaser's activities for a fee or other form of consideration. For information on obtaining additional rights, please contact outlicensing@lifetech.com or Out Licensing, Life Technologies, 5791 Van Allen Way, Carlsbad, California 92008.

Limited Use Label License No. 22: Vectors and Clones Encoding Histidine Hexamer

This product is licensed under U.S. and foreign equivalents from Hoffmann-LaRoche, Inc., Nutley, NJ and/or Hoffmann-LaRoche Ltd., Basel, Switzerland and is provided only for use in research. Information about licenses for commercial use is available from QIAGEN GmbH, Max-Volmer-Str. 4, D-40724 Hilden, Germany.

LIFE TECHNOLOGIES CORPORATION AND/OR ITS AFFILIATE(S) DISCLAIM ALL WARRANTIES WITH RESPECT TO THIS DOCUMENT, EXPRESSED OR IMPLIED, INCLUDING BUT NOT LIMITED TO THOSE OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR NON-INFRINGEMENT. TO THE EXTENT ALLOWED BY LAW, IN DO EVENT SHALL USE TECHNOLOGIES AND/OR ITS AFFILIATE(S) BE LUBBLE, WHETHER IN CONTRACT, TORT, WARRANTY, OR UNDER ANY STATUTE OR ON ANY OTHER BASIS FOR SPECIAL, INCIDENTAL, INDIRECT, PUNITIVE, MULTIPLE OR CONSEQUENTIAL DAMAGES IN CONNECTION WITH OR ARISING FROM THIS DOCUMENT, INCLUDING BUT NOT LIMITED TO THE USE THEREOF.

©2012 Life Technologies Corporation. All rights reserved. The trademarks mentioned herein are the property of Life Technologies Corporation or their respective owners.

For support visit www.lifetechnologies.com/support or email techsupport@lifetech.com

www.lifetechnologies.com



Novex® Sharp Protein Standard

Cat. no. LC5800 Size $2 \times 250 \,\mu\text{L}$ Store at -30°C to -10°C Pub. Part no. LC5800.pps MAN0005693 Rev. Date 25 May 2012

Description

The Novex® Sharp Standard for SDS-PAGE allows you to easily visualize protein molecular weight ranges during electrophoresis and evaluate western transfer efficiency.

The important features of the standard are:

- Consists of 12 pre-stained protein bands in the range of 3.5–260 kDa
- Suitable for NuPAGE® Novex®, Tris-Glycine, and Tricine Gels
- Supplied in a ready-to-use format

Specifications

Contents: $2 \times 250 \,\mu\text{L}$ of Novex® Sharp Standard Storage Buffer: 65 mM Tris pH 6.5, 30% glycerol, 2% SDS,

2.5 mM EDTA

Stability: 12 months at -20°C

Product Qualification

The Certificate of Analysis (CofA) provides detailed quality control information for each product. The CofA is available on our website at www.lifetechnologies.com/support, and is searchable by product lot number, which is printed on each box.

For research use only. Not for human or animal therapeutic or diagnostic use.

Accessory Products

A wide variety of pre-cast gels, buffers, protein stains and standards are available separately from Life Technologies for electrophoresis, blotting and protein analysis.

For details, visit www.lifetechnologies.com.

Limited Use Label License: Research Use Only

The purchase of this product conveys to the purchaser the limited, non-transferable right to use the purchased amount of the product only to perform internal research for the sole benefit of the purchaser. No right to resell this product or any of its components is conveyed expressly, by implication, or by estoppel. This product is for internal research purposes only and is not for use in commercial applications of any kind, including, without limitation, quality control and commercial services such as reporting the results of purchaser's activities for a fee or other form of consideration. For information on obtaining additional rights, please contact outlicensing@lifetech.com or Out Licensing, Life Technologies, 5791 Van Allen Way, Carlsbad, California 92008.

Limited Use Label License No. 22: Vectors and Clones Encoding Histidine Hexamer

This product is licensed under U.S. and foreign equivalents from Hoffmann-LaRoche, Inc., Nutley, NJ and/or Hoffmann-LaRoche Ltd., Basel, Switzerland and is provided only for use in research. Information about licenses for commercial use is available from QIAGEN GmbH, Max-Volmer-Str. 4, D-40724 Hilden, Germany.

LIFE TECHNOLOGIES CORPORATION AND/OR ITS AFFILIATE(S) DISCLAIM ALL WARRANTIES WITH RESPECT TO THIS DOCUMENT, EXPRESSED OR IMPLIED, INCLUDING BUT NOT LIMITED TO THOSE OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR NON-INFRINGEMENT. TO THE EXTENT ALLOWED BY LAW, IN NO EVENT SHALL LIFE TECHNOLOGIES AND/OR ITS AFFILIATE(S) BE LUBLE, WHETHER IN CONTRACT, TORT, WARRANTY, OR UNDER ANY STATUTE OR ON ANY OTHER BASIS FOR SPECIAL, INCIDENTAL, INDIRECT, PUNITIVE, MULTIPLE OR CONSEQUENTIAL DAMAGES IN CONNECTION WITH OR ARBINGS FROM THIS DOCUMENT, INCLUDING BUT NOT LIMITED TO THE USE THEREOF.

 \odot 2012 Life Technologies Corporation. All rights reserved. The trademarks mentioned herein are the property of Life Technologies Corporation or their respective owners.

For support visit www.lifetechnologies.com/support or email techsupport@lifetech.com



novex[®]

by life technologies

Novex® Sharp Protein Standard

Cat. no. LC5800 Size $2 \times 250 \,\mu\text{L}$ Store at -30°C to -10°C

Pub. Part no. LC5800.pps MAN0005693 **Rev. Date** 25 May 2012

Description

The Novex® Sharp Standard for SDS-PAGE allows you to easily visualize protein molecular weight ranges during electrophoresis and evaluate western transfer efficiency.

The important features of the standard are:

- Consists of 12 pre-stained protein bands in the range of 3.5–260 kDa
- Suitable for NuPAGE® Novex®, Tris-Glycine, and Tricine Gels
- Supplied in a ready-to-use format

Specifications

Contents: $2 \times 250 \,\mu\text{L}$ of Novex® Sharp Standard Storage Buffer: 65 mM Tris pH 6.5, 30% glycerol, 2% SDS,

2.5 mM EDTA

Stability: 12 months at -20°C

Product Qualification

The Certificate of Analysis (CofA) provides detailed quality control information for each product. The CofA is available on our website at www.lifetechnologies.com/support, and is searchable by product lot number, which is printed on each box.

For research use only. Not for human or animal therapeutic or diagnostic use.

www.lifetechnologies.com

Directions

The Novex® Sharp Standard is supplied ready-to-use. There is no need to heat or add reducing agent.

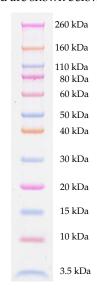
- 1. Thaw the ladder at room temperature.
- 2. Vortex gently to ensure that the solution is homogenous.
- 3. To obtain best results, load the standard into the well of an SDS gel using the loading volumes listed in the following table:

Gel Type	Electrophoresis	Blotting
Mini-Gel (1.0-mm thick)	10 μL	5 μL
Mini-Gel (1.5-mm thick)	12 µL	6 μL
Midi gel (12+2 well) Sample Lane	14 μL	7 μL
Midi gel (12+2 well) Marker Lane	5 μL	2.5 μL
Midi gel (20-well)	8 µL	4 μL
Midi gel (26-well)	5 μL	2.5 µL

After electrophoresis, you should observe the protein standard bands as shown on page 3. For blotting conditions, follow the specific protocol for your gel and membrane types.

Example

 $10~\mu L$ of Novex® Sharp Standard was analyzed on a NuPAGE® Novex® 4–12% Bis-Tris Gel with 1X MES Running Buffer. The molecular weights of the protein bands in the Novex® Sharp Pre-stained Standard are shown below:



Note: The Novex® Sharp Standard molecular weight estimates are the same in NuPAGE® Novex®, Tris-Glycine, and Tricine Gels. The 3.5 kDa band is visible only on NuPAGE® gels with 1X MES running buffer.

Directions

The Novex® Sharp Standard is supplied ready-to-use. **There is no need to heat or add reducing agent.**

- 1. Thaw the ladder at room temperature.
- 2. Vortex gently to ensure that the solution is homogenous.
- 3. To obtain best results, load the standard into the well of an SDS gel using the loading volumes listed in the following table:

Gel Type	Electrophoresis	Blotting
Mini-Gel (1.0-mm thick)	10 μL	5 μL
Mini-Gel (1.5-mm thick)	12 µL	6 μL
Midi gel (12+2 well) Sample Lane	14 μL	7 μL
Midi gel (12+2 well) Marker Lane	5 μL	2.5 µL
Midi gel (20-well)	8 µL	4 μL
Midi gel (26-well)	5 μL	2.5 µL

After electrophoresis, you should observe the protein standard bands as shown on page 3. For blotting conditions, follow the specific protocol for your gel and membrane types.

Example

2

 $10~\mu L$ of Novex® Sharp Standard was analyzed on a NuPAGE® Novex® 4–12% Bis-Tris Gel with 1X MES Running Buffer. The molecular weights of the protein bands in the Novex® Sharp Pre-stained Standard are shown below:



Note: The Novex® Sharp Standard molecular weight estimates are the same in NuPAGE® Novex®, Tris-Glycine, and Tricine Gels. The 3.5 kDa band is visible only on NuPAGE® gels with 1X MES running buffer.

2