

ZOOM® Strips

Introduction

The ZOOM® Strip is a pre-cast immobilized pH gradient (IPG) gel cast on a plastic backing. ZOOM® Strips are easy to use and produce reproducible pH gradients, ideal for isoelectric focusing (IEF) of proteins.

Types of ZOOM[®] Strips

ZOOM® Strips are available in the following pH ranges:

Product	Catalog no.
ZOOM® Strip pH 3-10NL (non-linear)	ZM0011
ZOOM® Strip pH 4-7	ZM0012
ZOOM® Strip pH 6-10	ZM0013
ZOOM [®] Strip pH 4.5-5.5	ZM0014
ZOOM® Strip pH 5.3-6.3	ZM0015
ZOOM® Strip pH 6.1-7.1	ZM0016
ZOOM® Strip pH 3-10L (linear)	ZM0018

Specifications

7.0 cm Length of the gel: Length of the ZOOM® Strip: $7.7 \, \mathrm{cm}$ Gel thickness: $0.5 \, \mathrm{mm}$ Width of the ZOOM® Strip: $3.3 \, \text{mm}$ Broad pH range: 3-10NL, 3-10L, 4-7, and 6-10 Narrow pH range: 4.5-5.5, 5.3-6.3, and 6.1-7.1 Store at -20°C Storage: Number of ZOOM® Strips 12/package

The anode (acidic) end is marked as (+) and cathode (basic) end as (-). Each ZOOM® Strip is individually numbered for easy identification.

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This product is distributed for laboratory research only. CAUTION: Not for diagnostic use. The safety and efficacy of this product in diagnostic or other clinical uses has not been established.

Amount of Protein

We recommend loading 5-15 μg (for silver staining) or 20-50 μg (for Coomassie staining) of total protein per ZOOM® Strip.

If you are using fractionated or partially purified protein sample, you may load up to 400 µg of a fractionated protein sample. Higher protein loads can be loaded on narrow pH range ZOOM® Strips.

We recommend preparing your samples with the ZOOM® 2D Protein Solubilizer available from Invitrogen (refer to the manual for details).

Rehydrating ZOOM® Strips

ZOOM® Strips are supplied dry and are rehydrated in the ZOOM® IPGRunner™ Cassette (see page 4). For detailed instructions on sample preparation and rehydration, see the ZOOM® IPGRunner™ System Manual (available from our Web site at www.invitrogen.com).

- 1. Prepare your protein sample using ZOOM® 2D Protein Solubilizer in a final volume of 140 μ l (see ZOOM® IPGRunner™ Manual).
- Load 140 µl of the sample from Step 1 into each Enclosed Channel of the ZOOM[®] IPGRunner[™] Cassette. Leave unused channels empty.
- Peel a ZOOM® Strip away from the card backing and slide acidic end
 (+) of the strip into the Enclosed Channel of the Cassette until the acidic end of each strip touches the end of the channel slot.
- Seal all Sample Loading Wells (including unused wells) with Sealing Tape (supplied with ZOOM[®] IPGRunner[™] Cassettes).
- 5. Incubate ZOOM® Strips in the ZOOM® IPGRunner™ Cassette for 1 hour at room temperature. Then assemble the ZOOM® IPGRunner™ Mini-Cell (see ZOOM® IPGRunner™ Manual) and perform isoelectric focusing (next page).

Amount of Protein

For sample fractionation, prepare the protein sample at a final concentration of 0.6~mg/ml as described in the manual. You will need $650~\mu$ l of sample for each Sample Chamber of the ZOOM® IEF Fractionator. The ZOOM® IEF Fractionator is designed to reproducibly fractionate 2 mg of proteins.

For details on sample preparation, see the ZOOM® IEF Fractionator manual available from www.invitrogen.com.

Product Qualification

ZOOM® Disks are functionally qualified by performing sample fractionation of 2 mg of rat liver lysate as described in the manual. Each fraction obtained after fractionation is further analyzed by two-dimensional (2D) gel electrophoresis using immobilized pH gradient (IPG) strips for first dimension and NuPAGE® Novex Gels for second dimension under standard conditions. The gels are stained and visualized for proper resolution and migration of spots.

Limited Use Label License

This product is covered by Limited Use Label License No. 143. See the ZOOM® IEF Fractionator manual for detailed information.

The ZOOM® IEF Fractionator was in part developed pursuant to a license from The Wistar Institute of Anatomy and Biology, located in Philadelphia, Pennsylvania. Established in 1892, The Wistar Institute was the first independent medical research facility in the United States.

Accessory Products

Additional products that can be used with ZOOM® Disks are available from Invitrogen. For more details, visit www.invitrogen.com.

Product	Quantity	Catalog no.
ZOOM® IEF Fractionator	1 EA	ZF10002
ZOOM® 2D Protein Solubilizer 1	20 ml	ZS10001
ZOOM® 2D Protein Solubilizer 2	20 ml	ZS10002
ZOOM® 2D Protein Solubilizer Kit	1 kit	ZS10003
ZOOM® Focusing Buffer pH 3-7	10 ml	ZB10037
ZOOM® Focusing Buffer pH 7-12	10 ml	ZB10712
ZOOM® Strip pH 3-10NL	12	ZM0011
ZOOM® Strip pH 4-7	12	ZM0012
ZOOM [®] Strip pH 6-10	12	ZM0013
ZOOM [®] Strip pH 4.5-5.5	12	ZM0014
ZOOM® Strip pH 5.3-6.3	12	ZM0015
ZOOM® Strip pH 6.1-7.1	12	ZM0016
ZOOM® Strip pH 9-12	12	ZM0017
ZOOM® Strip pH 3-10L	12	ZM0018

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