

Protocol 101_2D gels – Invitrogen zoom system

Advantage over standard 2D: Pre-cast gels and cellulose mouted IPG gels make results more reproducible. BUT only mini-gel systems so can give low resoluion in too much protein loaded.

Equipment and reagents required

2D Zoom protein solubilising buffer kit (2 different buffers. You may need to try both as there is no logic in what works best for your proteins)

Ampholytes (check appropriate pH range)

IPG focusing strips (check desired pH range. NB many ribosomal proteins focus at a pH of >11)

IPG running trays, wicks, sealing stickers

Invitrogen pre-cast mini gradient gels (4-20%) with ONE LARGE WELL.

Zoom gel loading buffer

Running buffer

Zoom gel-running tank

For instructions of operation see the following URLs:

Ordering info, link to demo video:

<http://www.invitrogen.com/site/us/en/home/Products-and-Services/Applications/Protein-Expression-and-Analysis/Protein-Gel-Electrophoresis/2D-Gel-Electrophoresis/IPG-Runner-Introduction.html>

Technical info and link to PDF of manual “ZOOM IPGRunner Manual:

<http://www.invitrogen.com/site/us/en/home/Products-and-Services/Applications/Protein-Expression-and-Analysis/Protein-Gel-Electrophoresis/2D-Gel-Electrophoresis/IPG-Runner--Technical-Information.html>