

FT-1H6270

SuperSep Phos-tag

Product Description

Name : **SuperSep Phos-tag (50 µmol/L)**

Catalog #:	<u>For Wako's Electrophoresis tank</u>	13wells : 30µl/well	17wells: 25 µl/well
Format :	Plate Size: 100 x 100 x 3 (mm)		
	Gel Size: 90 x 85 x 1 (mm)		
Gel :	6% Gel	192-17401	199-17391
	7.5% Gel	195-17371	192-17381
	10% Gel	193-16711	190-16721
	12.5% Gel	1H6270.195-16391	1H6280.193-16571
	15% Gel	193-16691	196-16701

Catalog #: **For Life Technologies electrophoresis tank**
XCell SureLock® Mini-Cell

Format :	Plate Size: 100 x 100 x 6.6 (mm)		
Gel :	7.5% Gel		192-18001
	12.5% Gel		199-18011

Catalog #: **For Biorad' electrophoresis tank**
Mini-PROTEAN® Tetra Cel

Format :	Plate Size: 83 x 100 x 3.9 (mm)		
Gel :	7.5% Gel		198-17981
	12.5% Gel		B8DQN0.195-17991

Storage : Store at 2-8°C Protect from light

Name : **EasySeparator™** 058-07681 , 1 unit

Technical and Scientific Information

SuperSep Phos-tag are precast polyacrylamide gels containing Phos-tag. Phos-tag is functional molecule that binds specifically to the phosphate group. This product can trap phosphorylated and non-phosphorylated proteins as different bands. The Gels have a neutral pH to obtain sharp bands.

It is not recommended to apply ordinary prestained protein ladders to polyacrylamide gels containing Phos-tag such as this product because the ladder patterns is disturbed. A prestained ladder recommended is BLUeye Prestained Protein Ladder (FO9810), which is designed to reduce disturbance of a ladder pattern in Phos-tag SDS-PAGE.

- Separates phosphorylated and non-phosphorylated proteins
- High resolution and sharp bands
- Long-term stability



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Additional materials required

- Running Buffer Solution (10X) (UP914959) 0.25 mol/L Tris, 1.92 mol/L Glycine, 1% SDS-PAGE
- Laemmli Buffer (1X) (HH6330) 0.125 mol/L Tris-HCl, pH 6.8, 20% Glycerol, 4% SDS, 10% 2-Mercaptoethanol, 0.004% BromoPhenol Blue (BPB)
- Electrophoresis apparatus – EasySeparator (058-07681)

Sample preparation

Phos - tag SDS - PAGE is vulnerable to contaminant in protein samples, especially to chelating reagent, vanadic acid, inorganic salts, surfactants. Cleaning them up by TCA precipitation, dialysis or desalting is strongly recommended before Phos - tag SDS - PAGE.

Pre-treatment for transfer

An additional procedure, elimination of zinc ions (Zn^{2+}) from the gel using EDTA, is necessary before transfer. This procedure increases transfer efficiency of proteins from a gel to a membrane.

- 1) Prepare 1x transfer buffer with 10 mmol/L EDTA and without EDTA.
- 2) Soak the gel in 1x transfer buffer with 10 mmol/L EDTA for a minimum of 20 minutes with gentle agitation. Repeat it 3 times with buffer exchanges.
- 3) Soak the in 1x transfer buffer without 10 mmol/L EDTA for 10 minutes with gentle agitation.
- 4) Transfer the proteins from the gel to a membrane*.

* A Wet-tank method is strongly recommended for effective protein transfer



Procedure

- 1) Remove the gel plate and set it into the apparatus.
- 2) Fill the reservoir with running buffer
- 3) Carefully remove the comb from the gel
- 4) Load the samples* into the wells.* Prepare the sample using the following method. Mix sample with the same volume of Laemmli Buffer and heat for 5 min at 95°C. Cool it to room temperature.
- 5) Start the electrophoresis at 20 mA/gel for 1 hour until the BPB reaches the bottom of the gel.
- 6) Remove the gel and proceed to the next step.

References

Kinoshita E. *et al.*, Mol. Cell. Proteomics, 5:749 (2006)

Yamada S. *et al.*, Anal. Biochem., 360:160 (2007)

Kinoshita-Kikuta E. *et al.*, Mol. Cell. Proteomics, 6:356 (2007)

Ordering information

Catalog size quantities and prices may be found at <http://www.interchim.com>.

Please contact InterBioTech – Interchim for any other information

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