Phos-tag application data

Profiling of phosphorylation of intracellular β-catenin
～ neutral pH SDS-PAGE with Zn^{2+}-Phos-tag ～

● SAMPLE INFORMATION

		MW (kDa)
Protein	β-catenin (SW480 cell)	85
Protein status	normal	-

● ELECTROPHORESIS CONDITION

Gel	1D: 5.5% polyacrylamide (without Phos-tag) 2D: 6.0% polyacrylamide
Phos-tag conc.	25μM
Metal complex	Mn^{2+} or Zn^{2+}

Visualization	immunoblotting
Antibody	anti-β-catenin, anti-p-β-catenin

● ASSAY FLOW

1 Prevanadate or forskolin treatment of β-catenin
2 Normal SDS-PAGE as first dimention
3 Phos-tag SDS-PAGE as second dimention
4 Immunoblotting

● RESULT

・Zn^{2+}-Phos-tag SDS-PAGE showed better long-term stability than the Mg^{2+}-Phos-tag SDS-PAGE.

● NOTE

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● REFERENCE

Improved Phos-tag SDS-PAGE under neutral pH conditions for advanced protein phosphorylation profiling. Kinoshita E, Kinoshita-Kikuta E. : *Proteomics* , **11**, 319 (2011)

key words : β-catenin, SW480, Zn^{2+}-Phos-tag, Mg^{2+}-Phos-tag, 2D-PAGE