Phos-tag application data

Analysis of ataxia telangiectasia-mutated kinase (ATM)
～ Tris-AcOH buffered gel system for high molecular weight protein ～

● SAMPLE INFORMATION

		MW (kDa)
Protein	ATM (ataxia telangiectasia-mutated kinase)	350
Protein status	normal	-

● ELECTROPHORESIS CONDITION

Gel	3% polyacrylamide + 0.5% agarose (Tris-AcOH gel)
Phos-tag conc.	20μM
Metal complex	Zn^{2+}

Visualization	immunoblotting
Antibody	anti-ATM

● ASSAY FLOW

1 Actinomycin D treatment
2 Phos-tag electrophoresis
3 Immunoblotting

● RESULT

・Neutral-pH gel system buffered with Tris-AcOH in Zn^{2+}-Phos-tag SDS-PAGE showed advanced profiling of phosphoproteins with molecular masses of 10-350kDa

● NOTE

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● REFERENCE

Phos-tag SDS-PAGE systems for phosphorylation profiling of proteins with a wide range of molecular masses under neutral pH conditions. Kinoshita E, Kinoshita-Kikuta E, Koike T. : *Proteomics* , **12**, 192 (2012)

key words : ATM, Tris-AcOH, Zn^{2+}-Phos-tag, HMW