Phos-tag application data

Analysis of the phosphorylated species of β-casein
～ Mn^{2+}-Phos-tag SDS-PAGE with Laemmli system ～

● SAMPLE INFORMATION

		MW (kDa)
Protein	β-casein	24
Protein status	normal	-

● ELECTROPHORESIS CONDITION

Gel	10% polyacrylamide
Phos-tag conc.	100µM Mn^{2+} - Phos-tag
Metal complex	

Visualization	N/A
Antibody	N/A

● ASSAY FLOW
   1   AP treatment of protein
   2   Phos-tag electrophoresis

● RESULT
   In Mn^{2+}-phos-tag gel, isoformes were separated by defference of phosphorylated site, not by degree of phosphorylation per one molecule.

● NOTE
   Another data of simultaneous analysis   :   002-2

● REFERENCE
   Two-dimensional phosphate-affinity gel electrophoresis for the analysis of phosphoprotein isotypes. Kinoshita E, Kinoshita-Kikuta E, Matsubara M, Aoki Y, Ohie S, Mouri Y, Koike T. : *Electrophoresis* , **30**, 550, (2009)

   key words :   Mn^{2+}-Phos-tag, Laemmli, β -casein

Phos-tag application data

Analysis of the phosphorylated species of β-casein
～ 2-DE coupling urea-PAGE and Mn^{2+}-Phos-tag SDS-PAGE ～

● SAMPLE INFORMATION

		MW (kDa)
Protein	β-casein	24
Protein status	normal	-

● ELECTROPHORESIS CONDITION

Gel	1D: 4.0M urea + 6.0% polyacrylamide (without Phos-tag) 2D: 10% polyacrylamide
Phos-tag conc.	100µM Mn^{2+} - Phos-tag
Metal complex	

Visualization	N/A
Antibody	N/A

● ASSAY FLOW
  1   AP treatment of protein
  2   Urea-PAGE as the first dimention
  3   Phos-tag electrophoresis as the seconds dimention

● RESULT

  ・The separation of phosphoprotein isotype should be inproved relative to those by current gel electrophoresis method.
  ・Isoforme having same number of phosphorylation site were separated to different bands by this analysis.

● NOTE
  Another data of simultaneous analysis   :   002-1

● REFERENCE
Two-dimensional phosphate-affinity gel electrophoresis for the analysis of phosphoprotein isotypes. Kinoshita E, Kinoshita-Kikuta E, Matsubara M, Aoki Y, Ohie S, Mouri Y, Koike T. : *Electrophoresis* , **30**, 550, (2009)

  key words :   Mn^{2+}-Phos-tag, Laemmli, β -casein, Urea-PAGE, 2D-PAGE