

**MATERIAL DATA SHEET****SUMO-interacting Motif (SIM) Peptide Agarose, *human recombinant***  
**Cat. # AM-200**

Three different amino acid consensus motifs have been identified as mediating SUMO binding and/or interaction. These SUMO-interacting motifs (SIMs) all contain a hydrophobic core sequence with a stretch of acidic amino acids either at the N- or C-terminus. Many SIMs also contain one or more Ser or Thr residues which are potential phosphorylation sites *in vivo*. Studies indicate that the SIM hydrophobic region is essential for mediating binding to the  $\alpha$ -helix and  $\beta_2$ -strand surfaces on SUMO proteins. The negatively charged residues surrounding the hydrophobic core can influence binding affinities and can dictate binding preferences for the various SUMO isoforms. This affinity resin is derived from a PIAS sequence, and can be used for the enrichment, isolation and identification of SUMOylated proteins.

**Product Information**

<b>Quantity:</b>	0.5 ml, 50% slurry of resin and buffer
<b>Stock:</b>	0.5 ml SIM peptide agarose supplied in a 1 ml total volume of 50 mM Hepes pH 7.5, 250 mM NaCl.

**Use & Storage**

<b>Use:</b>	Equilibrate resin by washing with 5-10 ml desired start buffer. Binding and elution of material is dependent on individual experimental conditions.
<b>Storage:</b>	The agarose can be re-used for at least 5-10 applications if properly maintained. After use, clean resin with 5 ml 50 mM Tris pH 9.0, 1 M KCl. Remove cleaning solution by washing resin with 5 ml storage buffer. Resin should be stored at 4°C and 0.01% sodium azide can be added as a bacteriostatic agent. DO NOT FREEZE.

**Literature**

<b>References:</b>	C-M Hecker., <i>et al.</i> (2006) <i>J. Biol. Chem.</i> <b>281</b> : 16117-16127 Hannich J.T., <i>et al.</i> (2005) <i>J. Biol. Chem.</i> <b>280</b> : 4102-4110 Minty A., <i>et al.</i> (2000) <i>J. Biol. Chem.</i> <b>275</b> : 36316-35323 Song J., <i>et al.</i> (2004) <i>Proc. Natl. Acad. Sci.</i> <b>101</b> : 14373-14378 Reverter D. and Lima C.D. (2005) <i>Nature</i> <b>435</b> : 687-692
--------------------	---

***For Laboratory Research Use Only, Not For Use in Humans***