

MATERIAL DATA SHEET

S5a/Angiocidin UIM Domains Peptide Agarose, *human recombinant* Cat. # AM-110

S5a (Rpn10) is a component of the regulatory complex (19S) of the 26S proteasome. By binding to and recognizing poly-ubiquitinated proteins, it functions as a receptor for proteins destined for proteolytic degradation. S5a has a low affinity for mono-, di- and tri-Ub but binds efficiently to tetrameric ubiquitin and has a preference for longer polymers. The protein recognizes ubiquitin conjugates via two UIM (ubiquitin-interacting motif) domains at located at residues 211-230 (I) and 282-301 (II). Although both UIMs bind to poly-ubiquitin *in vitro*, UIM II has a 10-fold higher affinity for ubiquitin than UIM I. This affinity resin can be used for the enrichment, isolation and identification of ubiquitinated proteins, proteins that contain ubiquitin-like domains and/or 26S substrates.

Product Information

Quantity:	0.25 ml
Stock:	0.25 ml S5a/Angiocidin UIM domains peptide agarose supplied in a 0.5 ml total volume of 50 mM Hepes pH 7.5, 500 mM NaCl.

Use & Storage

Use:	Equilibrate resin by washing with 5-10 ml desired start buffer. Binding and elution of material is dependent on individual experimental conditions.
Storage:	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

References:	Beal R.E., (1998) <i>Biochem.</i> 37 :2925-2934 Deveraux Q., <i>et al.</i> (1994) <i>J. Biol. Chem.</i> 269 : 7059-7061 Deveraux Q., <i>et al.</i> (1995) <i>J. Biol. Chem.</i> 270 : 23726-23729 Ferrell K., <i>et al.</i> (1996) <i>FEBS. Lett.</i> 381 : 143-148 Fujiwara K., <i>et al.</i> (2004) <i>J. Biol. Chem.</i> 279 : 4760-4767 Haririnia A., <i>et al.</i> (2007) <i>J.Mol Biol.</i> 368 :753-766 Kang Y., <i>et al.</i> (2007) <i>J. Mol Biol.</i> 369 :168-176. Layfield R., <i>et al.</i> (2001) <i>Proteomics</i> 1 :773-777 Mayor T., <i>et al.</i> (2005) <i>Mol. Cell. Proteomics.</i> 4 :741-751. Mueller T.D. and Feignon J. (2003) <i>EMBO J.</i> 22 :4634-4645 Saeki Y., <i>et al.</i> (2002) <i>Biochem Biophys Res Commun.</i> 293 :986-992 Ventadour S., <i>et al.</i> (2007) <i>J. Biol. Chem.</i> 282 : 5302-5309 Wang,Q., <i>et al.</i> (2005) <i>J. Mol. Biol.</i> 348 : 727-739
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