

## 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

<b>Quantity:</b>	0.25 ml
<b>Stock:</b>	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

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