

MATERIAL DATA SHEET

Ataxin UIM Domains Agarose, *human recombinant* Cat. # AM-115

Ataxin-3 protein belongs to a novel group of cysteine proteases similar to USP-type ubiquitin proteases and has deubiquitinating activity *in vitro*. The full-length protein contains an catalytic N-terminal Josephin domain, three ubiquitin interacting motifs (UIMs), and a variable C-terminus with a polyglutamine stretch. Ataxin3 has deconjugating activity and functions as a mixed linkage, chain editing enzyme with preferential cleavage of K63 linkages in mixed chains. Ataxin3 also bind both K48-linked and K63-linked poly-Ub chains via its UIM domains and preferentially interacts with four or more ubiquitin units. This affinity resin can be used for the enrichment, isolation and identification of K48-linked (preferentially) or K63-linked poly-Ub chains or ubiquitinated substrates that contain these linkages.

Product Information

Quantity:	0.25 ml
Stock:	0.25 ml of Ataxin UIM domains agarose is supplied in 0.5 ml total volume of 50 mM Hepes pH 7.5, 250 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 2 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, 0.01% sodium azide can be added as a bacteriostatic agent. DO NOT FREEZE.

Literature

References:	Albrecht., <i>et al.</i> (2004) <u>Eur. J. Biochem.</u> 271 :3155-3170 Buchberger A. (2002) <u>Tren. Cell. Biol.</u> 12 :216-221 Burnett B., <i>et al.</i> (2003) <u>Hum. Mol Genet.</u> 12 :3195-3205 Hurley J.H., <i>et al.</i> (2006) <u>Biochem. J.</u> 399 :361-372 Mao Y., <i>et al.</i> (2005) <u>Proc. Natl. Acad. Sci.</u> 102 :12700-12705 Shoesmith S.J., <i>et al.</i> (2005) <u>J. Biol. Chem.</u> 280 :32026-32034
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