Product datasheet

anti-p97 ATPase mouse monoclonal, 58.13.3, lyophilized, purified

Short overview

Cat. No.	61078
Quantity	50 µg
Concentration	50 µg/ml after reconstitution with 1 ml dist. water

Product description

Host	Mouse
Antibody Type	Monoclonal
Isotype	IgG1
Clone	58.13.3
Immunogen	15S Mg2+ ATPase complex purified from Xenopus laevis ovary
Formulation	Lyophilized; reconstitute in 1 ml dist. water (final solution contains 0.09% sodium azide, 0.5% BSA in PBS buffer, pH 7.4)
UniprotID	P55072 (Human), G1SR03 (Rabbit), P46462 (Rat)
Synomym	Transitional endoplasmic reticulum ATPase, TER ATPase, EC 3.6.4.6, 15S Mg(2+-ATPase p97 subunit, Valosin-containing protein, VCP, VCP
Conjugate	Unconjugated
Purification	Affinity chromatography
Storage before reconstitution	2-8°C until indicated expiry date
Storage after reconstitution	Up to 3 months at 2-8°C; long term storage in aliquots at -20°C; avoid freeze/thaw cycles
Intended use	Research use only
Application	WB
Reactivity	Human, Rabbit, Rat, Xenopus
No reactivity	Budding yeast Cdc48p

Applications

Immunocytochemistry (ICC)	Not recommended
Immunoprecipitation (IP)	Not recommended
Western Blot (WB)	Assay dependent

Background

p97 ATPase/VCP (also described as valosin-containing protein) is implicated in homotypic membrane fusion events and is related to the N-ethyl maleimide-sensitive fusion protein NSF/Sec18p. The antibody reacts with the p97 subunit of 15S Mg2+-ATPase. p97/VCP is involved in ubiquitin-proteasome dependent protein degradation processes and involvement was also found e.g. in the formation of neuronal inclusion bodies in neuro-degenerative diseseases (e.g. Parkinson's disease).

Positive control: immunoblots with protein extracts from all vertebrate tissues and cells.

Reactivity on cultured cell lines: all vertebrate cells and tissues tested so far: e.g. Xenopus laevis; rabbit, rat, human; does not crossreact with the corresponding protein in budding yeast (Cdc48p).

Product images

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References

Publication	Species	Application
Badenes,M. et al. Deletion of iRhom2 protects against diet-induced obesity by increasing thermogenesis. Mol Metab. 31, 67-84(2020).	mouse	WB
Trepte, P. et al. LuTHy: a double-readout bioluminescence-based two-hybrid technology for quantitative mapping of protein-protein interactions in mammalian cells. Mol. Syst. Biol. 14, e8071 (2018).	human	WB
Arumughan, A. et al. Quantitative interaction mapping reveals an extended UBX domain in ASPL that disrupts functional p97 hexamers. Nat. Commun. 7, 1â€“13 (2016).	human	WB
HÃ¤big, K. et al. LRRK2 guides the actin cytoskeleton at growth cones together with ARHGEF7 and Tropomyosin 4. Biochim. Biophys. Acta - Mol. Basis Dis. 1832, 2352â€“2367 (2013).	human	WB
HÃ¼bener, J. et al. N-terminal ataxin-3 causes neurological symptoms with inclusions, endoplasmic reticulum stress and ribosomal dislocation. Brain 134, 1925â€“1942 (2011).	human	WB