Product datasheet

anti-p97 ATPase mouse monoclonal, 58.13.3, supernatant concentrate

Short overview

Cat. No.	65278
Quantity	500 µl

Product description

Host	Mouse
Antibody Type	Monoclonal
Isotype	IgG1
Formulation	Contains 0.09% sodium azide
Note	Centrifuge prior to opening
Conjugate	Unconjugated
Purification	Hybridoma cell culture supernatant concentrate
Storage	Short term 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)	1:2,000-1:5,000

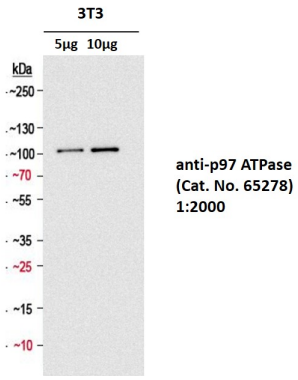
Background

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).

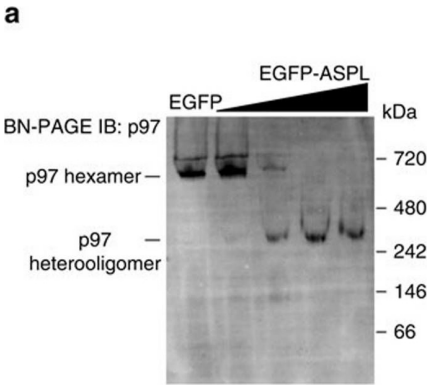
Positive control: immunoblots with protein extracts from all vertebrate tissues and cells.

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).

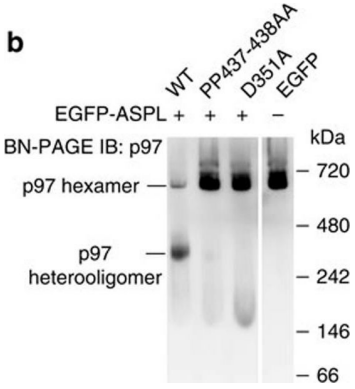
Product images



WB with anti-p97 ATPase antibody (Cat. No. 65278, 1:2000), 3T3 whole cell lysate (5-10 µg)



Arumughan, A., Roske, Y., et al. Quantitative interaction mapping reveals an extended UBX domain in ASPL that disrupts functional p97 hexamers. Nat Commun. 2016-10-20. Species/Reactant: Homo sapiens (Human)Applications: Western BlottingImage collected and cropped by CiteAb from the following publication, provided under a CC-BY licence.



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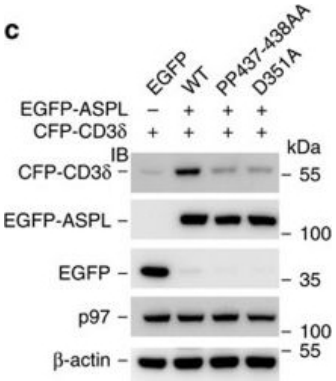

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References

Publication	Species	Application
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
Badenes,M. et al. Deletion of iRhom2 protects against diet-induced obesity by increasing thermogenesis. Mol Metab. 31, 67-84(2020).	mouse	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
Lauten, M. et al. Unsupervised proteome analysis of human leukaemia cells identifies the Valosin-containing protein as a putative marker for glucocorticoid resistance. Leuk. 20, 820â€“826 (2006).	human	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