

## Product datasheet

# anti-p97 ATPase mouse monoclonal, 58.13.3, supernatant concentrate

### Short overview

<b>Cat. No.</b>	65278
<b>Quantity</b>	500 µl

### Product description

<b>Host</b>	Mouse
<b>Antibody Type</b>	Monoclonal
<b>Isotype</b>	IgG1
<b>Clone</b>	58.13.3
<b>Immunogen</b>	15S Mg <sup>2+</sup> ATPase complex purified from <i>Xenopus laevis</i> ovary
<b>Formulation</b>	Contains 0.09% sodium azide
<b>Synonym</b>	VCP, valosin-containing protein
<b>Note</b>	Centrifuge prior to opening
<b>Conjugate</b>	Unconjugated
<b>Purification</b>	Hybridoma cell culture supernatant concentrate
<b>Storage</b>	Short term at 2-8°C; long term storage in aliquots at -20°C; avoid freeze/thaw cycles
<b>Intended use</b>	Research use only
<b>Application</b>	WB
<b>Reactivity</b>	Human, Rabbit, Rat, <i>Xenopus</i>
<b>No reactivity</b>	Budding yeast Cdc48p

### Applications

<b>Immunocytochemistry (ICC)</b>	Not recommended
<b>Immunoprecipitation (IP)</b>	Not recommended
<b>Western Blot (WB)</b>	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 Mg<sup>2+</sup>-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 diseases (e.g. Parkinson's disease).

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

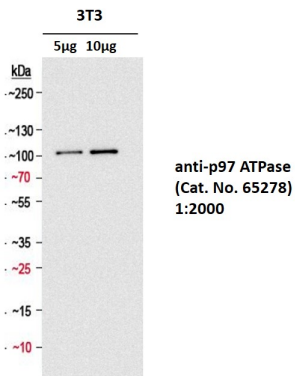
Reactivity on cultured cell lines: all vertebrate cells and tissues tested so far: e.g. *Xenopus laevis*; rabbit, rat, human; does not crossreact with the corresponding protein in budding yeast (Cdc48p).

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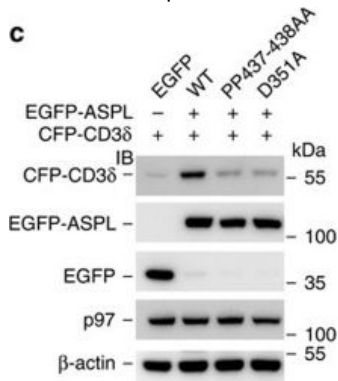
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2022 August 15 / Version: 65278/DS-230420ibg | Page 1

## 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 Blotting Image collected and cropped by CiteAb from the following publication, provided under a CC-BY licence.

## References

Publication	Species	Application
<a href="#">Hübener, J. et al. N-terminal ataxin-3 causes neurological symptoms with inclusions, endoplasmic reticulum stress and ribosomal dislocation. Brain 134, 1925–1942 (2011).</a>	human	WB
<a href="#">Badenes, M. et al. Deletion of iRhom2 protects against diet-induced obesity by increasing thermogenesis. Mol Metab. 31, 67-84(2020).</a>	mouse	WB
<a href="#">Arumughan, A. et al. Quantitative interaction mapping reveals an extended UBX domain in ASPL that disrupts functional p97 hexamers. Nat. Commun. 7, 1–13 (2016).</a>	human	WB
<a href="#">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, 820–826 (2006).</a>	human	WB
<a href="#">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).</a>	human	WB