

#56266 Store at -20C

## PRSS15/LONP1 (D7L8M) Rabbit mAb



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**For Research Use Only. Not for Use in Diagnostic Procedures.**

Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source/Isotype:	UniProt ID:	Entrez-Gene Id:
WB	H	Endogenous	106	Rabbit IgG	#P36776	9361

<b>Product Usage Information</b>	<b>Application</b> Western Blotting	<b>Dilution</b> 1:1000
<b>Storage</b>	Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at -20°C. Do not aliquot the antibody.	
<b>Specificity / Sensitivity</b>	PRSS15/LONP1 (D7L8M) Rabbit mAb recognizes endogenous levels of total PRSS15/LONP1 protein.	
<b>Source / Purification</b>	Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Phe920 of human PRSS15/LONP1 protein.	
<b>Background</b>	PRSS15/LONP1 is an ATP-dependent serine protease that selectively degrades misfolded, misassembled, or damaged proteins in mitochondrial matrix. PRSS15/LONP1 is induced by hypoxic, proteotoxic, and endoplasmic reticulum (ER) stress to support cell survival (1). It has been reported that PRSS15/LONP1 inducibility is decreased during aging and chronic stress (2-4). PRSS15/LONP1 is found to be substantially elevated in lymphoma cells compared to resting or activated B cells, and knock-down or inhibition of PRSS15/LONP1 induces apoptosis in lymphoma cells (5). Mutation in PRSS15/LONP1 is associated with CODAS syndrome, a multi-system developmental disorder characterized by cerebral, ocular, dental, auricular, and skeletal anomalies (6).	
<b>Background References</b>	<ol style="list-style-type: none"> <li>1. Pinti, M. et al. (2015) <i>Cell Mol Life Sci</i>, 1-18.</li> <li>2. Bota, D.A. et al. (2002) <i>FEBS Lett</i> 532, 103-6.</li> <li>3. Lee, C.K. et al. (1999) <i>Science</i> 285, 1390-3.</li> <li>4. Ngo, J.K. et al. (2011) <i>J Gerontol A Biol Sci Med Sci</i> 66, 1178-85.</li> <li>5. Gibellini, L. et al. (2015) <i>Oncotarget</i> 6, 25466-83.</li> <li>6. Strauss, K.A. et al. (2015) <i>Am J Hum Genet</i> 96, 121-35.</li> </ol>	

<b>Species Reactivity</b>	Species reactivity is determined by testing in at least one approved application (e.g., western blot).
<b>Western Blot Buffer</b>	IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 5% w/v BSA, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.
<b>Applications Key</b>	<b>WB:</b> Western Blotting
<b>Cross-Reactivity Key</b>	<b>H:</b> human <b>M:</b> mouse <b>R:</b> rat <b>Hm:</b> hamster <b>Mk:</b> monkey <b>Vir:</b> virus <b>Mi:</b> mink <b>C:</b> chicken <b>Dm:</b> D. melanogaster <b>X:</b> Xenopus <b>Z:</b> zebrafish <b>B:</b> bovine <b>Dg:</b> dog <b>Pg:</b> pig <b>Sc:</b> S. cerevisiae <b>Ce:</b> C. elegans <b>Hr:</b> horse <b>GP:</b> Guinea Pig <b>Rab:</b> rabbit <b>All:</b> all species expected
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