

Store at
-20C
#28020**PRSS15/LONP1 (D8W1J) 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:
W	H M R	Endogenous	106	Rabbit IgG	#P36776	9361

Product Usage Information**Application**

Western Blotting

Dilution

1:1000

Storage

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.

Specificity/Sensitivity

PRSS15/LONP1 (D8W1J) Rabbit mAb recognizes endogenous levels of total PRSS15/LONP1 protein.

Source / Purification

Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Gly887 of human PRSS15/LONP1 protein.

Background

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).

Background References

1. Pinti, M. et al. (2015) *Cell Mol Life Sci*, 1-18.
2. Bota, D.A. et al. (2002) *FEBS Lett* 532, 103-6.
3. Lee, C.K. et al. (1999) *Science* 285, 1390-3.
4. Ngo, J.K. et al. (2011) *J Gerontol A Biol Sci Med Sci* 66, 1178-85.
5. Gibellini, L. et al. (2015) *Oncotarget* 6, 25466-83.
6. Strauss, K.A. et al. (2015) *Am J Hum Genet* 96, 121-35.

Species Reactivity

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

Western Blot Buffer

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.

Applications Key

W: Western Blotting

Cross-Reactivity Key

H: Human **M:** Mouse **R:** Rat

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