

Store at  
-20C  
#56266**PRSS15/LONP1 (D7L8M) Rabbit mAb**

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

<b>Applications:</b> W	<b>Reactivity:</b> H	<b>Sensitivity:</b> Endogenous	<b>MW (kDa):</b> 106	<b>Source/Isotype:</b> Rabbit IgG	<b>UniProt ID:</b> #P36776	<b>Entrez-Gene Id:</b> 9361
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**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 (D7L8M) 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 Phe920 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

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