Revision 1

Store at -20C

#13738

VIMP Antibody

Cell Signaling TECHNOLOGY®

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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, IP	H	Endogenous	21	Rabbit	#Q9BQE4	55829

Product Usage Information

Application	Dilution
Western Blotting	1:1000
Immunoprecipitation	1:200

Storage

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA and 50% glycerol. Store at –20°C. *Do not aliquot the antibody.*

Specificity/Sensitivity

VIMP Antibody recognizes endogenous levels of total VIMP protein.

Source / Purification

Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to residues near the carboxy terminus of human VIMP protein. Antibodies are purified by protein A and peptide affinity chromatography.

Background

VCP-interacting membrane protein (VIMP, selenoprotein S) is a putative reductase and endoplasmic reticulum (ER)-resident protein involved in the ER-associated degradation (ERAD) pathway (1,2). Research studies indicate that VIMP may play a protective role against inflammation and reduce ER-stress (3). The VIMP protein is a single-pass, transmembrane protein that recruits the cytosolic p97/VCP AAA-ATPase and its cofactors, UFD1 and NPL4, to the ER membrane (4). An ER membrane complex containing Derlin-1 and VIMP forms a critical node in the ERAD machinery and links substrate recognition in the ER lumen with the retrotranslocation function of the p97/VCP AAA-ATPase in the cytosol (1,4). Polymorphisms in the corresponding *VIMP* gene are associated with spontaneous preterm births and cardiovascular disease risk (5,6) while other studies do not support a correspondence between *VIMP* polymorphisms and inflammatory disorders (7).

Background References

1. Lilley, B.N. and Ploegh, H.L. (2005) *Proc Natl Acad Sci U S A* 102, 14296-301.
2. Christensen, L.C. et al. (2012) *J Biol Chem* 287, 26388-99.
3. Fradejas, N. et al. (2011) *Glia* 59, 959-72.
4. Ye, Y. et al. (2004) *Nature* 429, 841-7.
5. Wang, Y. et al. (2013) *PLoS One* 8, e65657.
6. Cox, A.J. et al. (2013) *Acta Diabetol* 50, 391-9.
7. Martínez, A. et al. (2008) *BMC Genomics* 9, 329.

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 nonfat dry milk, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.

Applications Key

W: Western Blotting **IP:** Immunoprecipitation

Cross-Reactivity Key

H: Human

Trademarks and Patents

Limited Uses

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