

**PLSCR1 antibody - N-terminal region**  
**Rabbit Polyclonal Antibody**  
**Catalog # AI14135**

**Specification**

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**PLSCR1 antibody - N-terminal region - Product Information**

Application	WB
Primary Accession	<a href="#">O15162</a>
Other Accession	<a href="#">NM_021105</a> , <a href="#">NP_066928</a>
Reactivity	Human, Rabbit, Dog
Predicted	Human
Host	Rabbit
Clonality	Polyclonal
Calculated MW	35kDa KDa

**PLSCR1 antibody - N-terminal region - Additional Information**

**Gene ID** 5359

**Alias Symbol** **MMTRA1B**  
**Other Names**  
Phospholipid scramblase 1, PL scramblase 1, Ca(2+)-dependent phospholipid scramblase 1, Erythrocyte phospholipid scramblase, MmTRA1b, PLSCR1

**Format**

Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose.

**Reconstitution & Storage**

Add 50 ul of distilled water. Final anti-PLSCR1 antibody concentration is 1 mg/ml in PBS buffer with 2% sucrose. For longer periods of storage, store at 20°C. Avoid repeat freeze-thaw cycles.

**Precautions**

PLSCR1 antibody - N-terminal region is for research use only and not for use in diagnostic or therapeutic procedures.

**PLSCR1 antibody - N-terminal region - Protein Information**

**Name** PLSCR1

**Function**

Catalyzes calcium-induced ATP-independent rapid bidirectional and non-specific movement of phospholipids (lipid scrambling or lipid flip-flop) between the inner and outer leaflet of the plasma membrane resulting in collapse of the phospholipid asymmetry which leads to phosphatidylserine externalization on the cell surface (PubMed: [10770950](http://www.uniprot.org/citations/10770950) target="\_blank">10770950</a>, PubMed: [18629440](http://www.uniprot.org/citations/18629440) target="\_blank">18629440</a>, PubMed: [23590222](http://www.uniprot.org/citations/23590222) target="\_blank">23590222</a>, PubMed: [23659204](http://www.uniprot.org/citations/23659204) target="\_blank">23659204</a>, PubMed: [24343571](http://www.uniprot.org/citations/24343571) target="\_blank">24343571</a>)

target="\_blank">24343571</a>, PubMed:<a href="http://www.uniprot.org/citations/24648509" target="\_blank">24648509</a>, PubMed:<a href="http://www.uniprot.org/citations/29748552" target="\_blank">29748552</a>, PubMed:<a href="http://www.uniprot.org/citations/32110987" target="\_blank">32110987</a>, PubMed:<a href="http://www.uniprot.org/citations/8663431" target="\_blank">8663431</a>, PubMed:<a href="http://www.uniprot.org/citations/9218461" target="\_blank">9218461</a>, PubMed:<a href="http://www.uniprot.org/citations/9485382" target="\_blank">9485382</a>, PubMed:<a href="http://www.uniprot.org/citations/9572851" target="\_blank">9572851</a>). Mediates calcium-dependent phosphatidylserine externalization and apoptosis in neurons via its association with TRPC5 (By similarity). Also exhibits magnesium-dependent nuclease activity against double-stranded DNA and RNA but not single-stranded DNA and can enhance DNA decatenation mediated by TOP2A (PubMed:<a href="http://www.uniprot.org/citations/17567603" target="\_blank">17567603</a>, PubMed:<a href="http://www.uniprot.org/citations/27206388" target="\_blank">27206388</a>). Negatively regulates FcR-mediated phagocytosis in differentiated macrophages (PubMed:<a href="http://www.uniprot.org/citations/26745724" target="\_blank">26745724</a>). May contribute to cytokine-regulated cell proliferation and differentiation (By similarity). May play a role in the antiviral response of interferon (IFN) by amplifying and enhancing the IFN response through increased expression of select subset of potent antiviral genes (PubMed:<a href="http://www.uniprot.org/citations/15308695" target="\_blank">15308695</a>). Inhibits the functions of viral transactivators, including human T-cell leukemia virus (HTLV)-1 protein Tax, human immunodeficiency virus (HIV)-1 Tat, human hepatitis B virus (HBV) HBx, Epstein-Barr virus (EBV) BZLF1 and human cytomegalovirus IE1 and IE2 proteins through direct interactions (PubMed:<a href="http://www.uniprot.org/citations/22789739" target="\_blank">22789739</a>, PubMed:<a href="http://www.uniprot.org/citations/23501106" target="\_blank">23501106</a>, PubMed:<a href="http://www.uniprot.org/citations/25365352" target="\_blank">25365352</a>, PubMed:<a href="http://www.uniprot.org/citations/31434743" target="\_blank">31434743</a>, PubMed:<a href="http://www.uniprot.org/citations/35138119" target="\_blank">35138119</a>). Mediates also the inhibition of influenza virus infection by preventing nuclear import of the viral nucleoprotein/NP (PubMed:<a href="http://www.uniprot.org/citations/29352288" target="\_blank">29352288</a>, PubMed:<a href="http://www.uniprot.org/citations/35595813" target="\_blank">35595813</a>). Plays a crucial role as a defense factor against SARS-CoV-2 independently of its scramblase activity by directly targeting nascent viral vesicles to prevent virus-membrane fusion and the release of viral RNA into the host-cell cytosol (PubMed:<a href="http://www.uniprot.org/citations/37438530" target="\_blank">37438530</a>).

### Cellular Location

Cell membrane; Single-pass type II membrane protein. Cell membrane; Lipid-anchor; Cytoplasmic side. Nucleus. Cytoplasm. Cytoplasm, perinuclear region Note=Localizes to the perinuclear region in the presence of RELT (PubMed:22052202). Palmitoylation regulates its localization to the cell membrane or the nucleus; trafficking to the cell membrane is dependent upon palmitoylation whereas in the absence of palmitoylation, localizes to the nucleus (PubMed:12564925)

### Tissue Location

Expressed in platelets, erythrocyte membranes, lymphocytes, spleen, thymus, prostate, testis, uterus, intestine, colon, heart, placenta, lung, liver, kidney and pancreas. Not detected in brain and skeletal muscle.

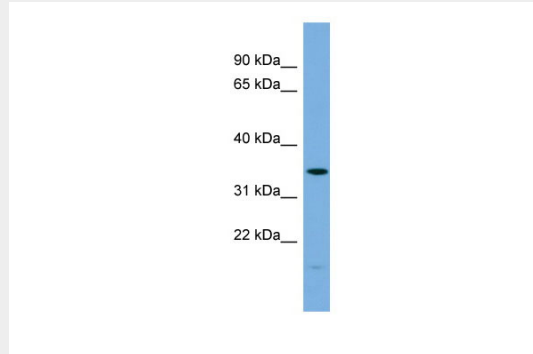
### PLSCR1 antibody - N-terminal region - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)

- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

#### **PLSCR1 antibody - N-terminal region - Images**



WB Suggested Anti-PLSCR1 Antibody Titration: 0.2-1  $\mu\text{g/ml}$

ELISA Titer: 1:312500

Positive Control: HT1080 cell lysate

PLSCR1 is supported by BioGPS gene expression data to be expressed in HT1080

#### **PLSCR1 antibody - N-terminal region - References**

- Zhou Q., et al. *J. Biol. Chem.* 272:18240-18244(1997).  
Kasukabe T., et al. *Biochem. Biophys. Res. Commun.* 249:449-455(1998).  
Wiedmer T., et al. *Biochim. Biophys. Acta* 1467:244-253(2000).  
Ota T., et al. *Nat. Genet.* 36:40-45(2004).  
Muzny D.M., et al. *Nature* 440:1194-1198(2006).