

**PANX1 Antibody**  
**Catalog # ASC11574****Specification****PANX1 Antibody - Product Information**

Application	WB, IF
Primary Accession	<a href="#">Q96RD7</a>
Other Accession	<a href="#">NP_056183</a> , <a href="#">39995064</a>
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	47 kDa KDa
Application Notes	PANX1 antibody can be used for detection of PANX1 by Western blot at 1 - 2 µg/mL. For immunofluorescence start at 20 µg/mL.

**PANX1 Antibody - Additional Information**Gene ID **24145****Target/Specificity**

PANX1; Two transcript variants encoding different isoforms have been found for this gene.

**Reconstitution & Storage**

PANX1 antibody can be stored at 4°C for three months and -20°C, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.

**Precautions**

PANX1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

**PANX1 Antibody - Protein Information**Name PANX1 ([HGNC:8599](#))

Synonyms MRS1

**Function**

Structural component of the gap junctions and the hemichannels involved in the ATP release and nucleotide permeation (PubMed:[16908669](http://www.uniprot.org/citations/16908669), PubMed:[20829356](http://www.uniprot.org/citations/20829356), PubMed:[30918116](http://www.uniprot.org/citations/30918116)). May play a role as a Ca(2+)-leak channel to regulate ER Ca(2+) homeostasis (PubMed:[16908669](http://www.uniprot.org/citations/16908669)). Plays a critical role in oogenesis (PubMed:[30918116](http://www.uniprot.org/citations/30918116)).

**Cellular Location**

Cell membrane; Multi-pass membrane protein {ECO:0000255|PROSITE-ProRule:PRU00351} Cell junction, gap junction. Endoplasmic reticulum membrane; Multi-pass membrane protein {ECO:0000255|PROSITE-ProRule:PRU00351}

#### **Tissue Location**

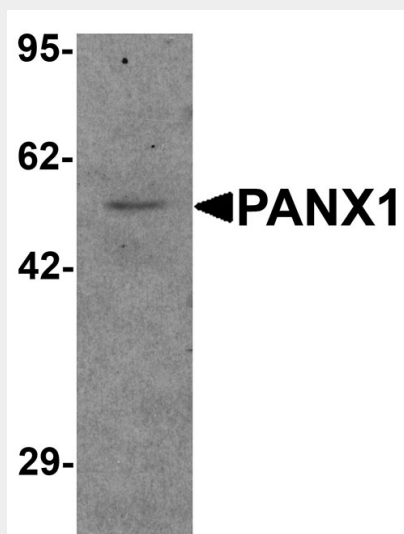
Widely expressed (PubMed:30918116). Highest expression is observed in oocytes and brain (PubMed:30918116). Detected at very low levels in sperm cells (PubMed:30918116)

#### **PANX1 Antibody - Protocols**

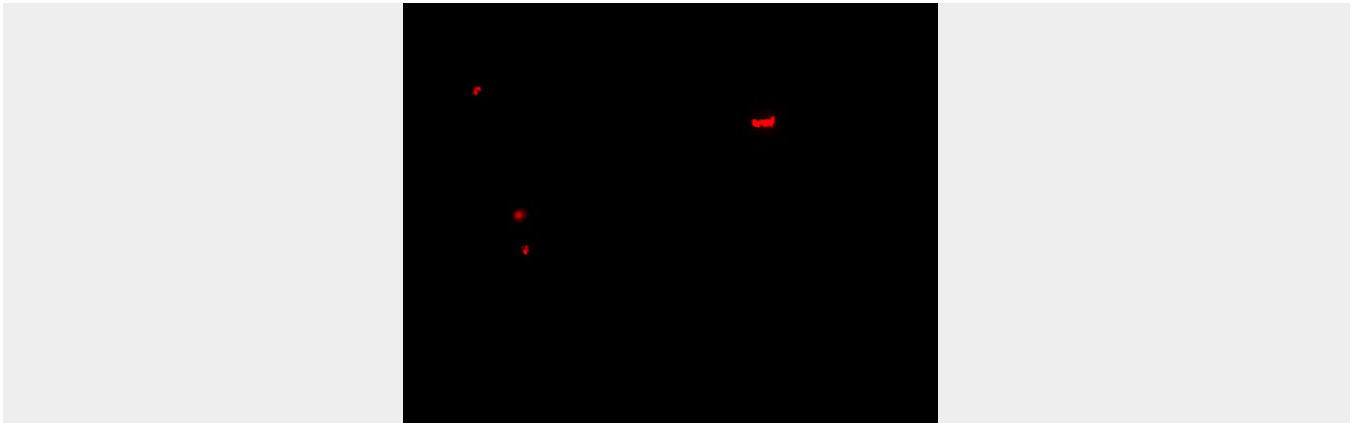
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

#### **PANX1 Antibody - Images**



Western blot analysis of PANX1 in human ovary tissue lysate with PANX1 antibody at 1 µg/mL.



Immunofluorescence of PANX1 in human ovary tissue with PANX1 antibody at 20 µg/mL.

### **PANX1 Antibody - Background**

**PANX1 Antibody:** The pannexin gene family encodes a second class of putative gap junction proteins and are highly conserved in invertebrates and mammals. Pannexins (Panx) are four-pass transmembrane proteins that oligomerize to form large pore ion and metabolite-permeable channels. Pannexin-1 (PANX1) and Pannexin-3 are closely related, while Pannexin-2 is a more distant relation. PANX1 is a transmembrane protein that forms a mechanosensitive ATP-permeable channel between adjacent cells and in the endoplasmic reticulum. PANX1 may play a role as a  $\text{Ca}^{2+}$  -leak channel to regulate ER  $\text{Ca}^{2+}$  homeostasis and regulates neural stem and progenitor cell proliferation.

### **PANX1 Antibody - References**

Barbe MT, Monyer H and Bruzzone R. Cell-cell communication beyond connexins: the pannexin channels. *Physiology* 2006; 21:103-14.  
Baranova A, Ivanov D, Petrash N, et al. The mammalian pannexin family is homologous to the invertebrate innexin gap junction proteins. *Genomics* 2004; 83:706-16.  
Sohl G, Maxeiner S and Willecke K. Expression and functions of neuronal gap junctions. *Nat. Rev. Neurosci.* 2005; 6:191-200  
Bao L, Locovei S and Dahl G. Pannexin membrane channels are mechanosensitive conduits for ATP. *FEBS Lett.* 2004; 572:65-8.