

**IZUM1 Antibody (N-term)**  
**Affinity Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP18187a**

**Specification**

**IZUM1 Antibody (N-term) - Product Information**

Application	WB,E
Primary Accession	<a href="#">Q8IYV9</a>
Other Accession	<a href="#">NP_872381.2</a>
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit Ig
Calculated MW	38930
Antigen Region	77-105

**IZUM1 Antibody (N-term) - Additional Information**

**Gene ID** 284359

**Other Names**

Izumo sperm-egg fusion protein 1, Oocyte binding/fusion factor, OBF, Sperm-specific protein izumo, IZUMO1

**Target/Specificity**

This IZUM1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 77-105 amino acids from the N-terminal region of human IZUM1.

**Dilution**

WB~~1:1000

**Format**

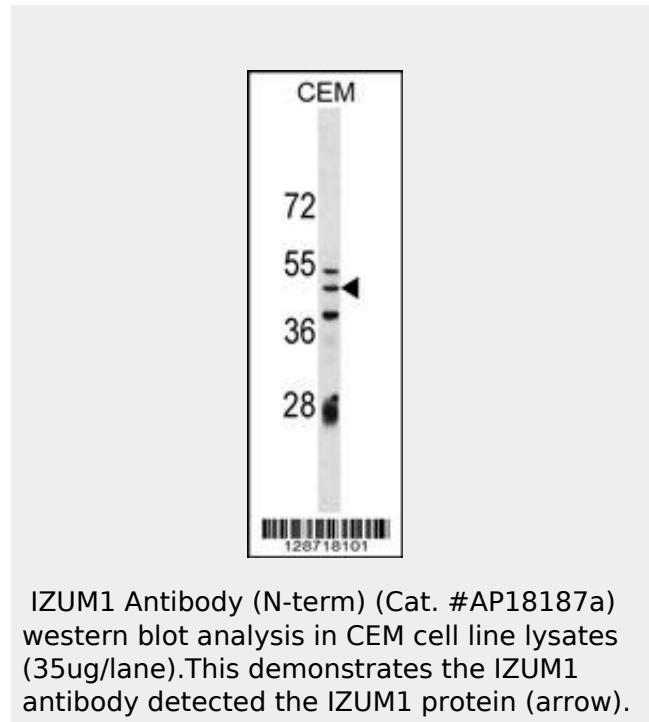
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

**Storage**

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

IZUM1 Antibody (N-term) is for research use only and not for use in diagnostic or



**IZUM1 Antibody (N-term) - Background**

The sperm-specific protein Izumo, named for a Japanese shrine dedicated to marriage, is essential for sperm-egg plasma membrane binding and fusion (Inoue et al., 2005 [PubMed 15759005]).

**IZUM1 Antibody (N-term) - References**

- Ellerman, D.A., et al. Mol. Reprod. Dev. 76(12):1188-1199(2009)
- Inoue, N., et al. Biochem. Biophys. Res. Commun. 377(3):910-914(2008)
- Granados-Gonzalez, V., et al. Fertil. Steril. 90(4):1246-1248(2008)
- Yatsenko, A.N., et al. Hum. Mol. Genet. 15(23):3411-3419(2006)
- Inoue, N., et al. Nature 434(7030):234-238(2005)

therapeutic procedures.

#### **IZUM1 Antibody (N-term) - Protein Information**

##### **Name** IZUMO1

{ECO:0000303|PubMed:15759005,  
ECO:0000312|HGNC:HGNC:28539}

##### **Function**

Essential sperm cell-surface protein required for fertilization by acting as a ligand for IZUMO1R/JUNO receptor on egg (PubMed:<a href="http://www.uniprot.org/citations/15759005" target="\_blank">15759005</a>). The IZUMO1:IZUMO1R/JUNO interaction is a necessary adhesion event between sperm and egg that is required for fertilization but is not sufficient for cell fusion (PubMed:<a href="http://www.uniprot.org/citations/15759005" target="\_blank">15759005</a>). The ligand- receptor interaction probably does not act as a membrane 'fusogen' (PubMed:<a href="http://www.uniprot.org/citations/15759005" target="\_blank">15759005</a>).

##### **Cellular Location**

Cell membrane; Single-pass type I membrane protein. Cytoplasmic vesicle, secretory vesicle, acrosome membrane {ECO:0000250|UniProtKB:Q9D9J7}; Single-pass type I membrane protein. Note=Localizes initially to the acrosome membrane of the sperm head (both outer and inner acrosomal membranes) (By similarity). During the acrosome reaction, translocates to the plasma membrane (PubMed:15759005) {ECO:0000250|UniProtKB:Q9D9J7, ECO:0000269|PubMed:15759005}

##### **Tissue Location**

Sperm-specific (at protein level) (PubMed:15759005). Detectable on sperm surface only after the acrosome reaction (PubMed:15759005).

#### **IZUM1 Antibody (N-term) - 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](#)