

JAGN1 Antibody
Catalog # ASC11957**Specification**

JAGN1 Antibody - Product Information

Application	WB, IHC
Primary Accession	Q8N5M9
Other Accession	NP_115881 , 190014601
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	Predicted: 20 kDa; Observed: 25 kDa KDa
Application Notes	JAGN1 antibody can be used for detection of JAGN1 by Western blot at 1 - 2 µg/ml. Antibody can also be used for immunohistochemistry starting at 2.5 µg/mL.

JAGN1 Antibody - Additional InformationGene ID **84522****Target/Specificity**

JAGN1; JAGN1 antibody is human, mouse and rat reactive. At least four isoforms of JAGN1 are known to exist; this antibody will detect all but isoform 2.

Reconstitution & Storage

JAGN1 antibody can be stored at 4°C for three months and -20°C, stable for up to one year.

Precautions

JAGN1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

JAGN1 Antibody - Protein InformationName JAGN1 ([HGNC:26926](#))**Function**

Endoplasmic reticulum transmembrane protein involved in vesicle-mediated transport, which is required for neutrophil function. Required for vesicle-mediated transport; it is however unclear whether it is involved in early secretory pathway or intracellular protein transport. Acts as a regulator of neutrophil function, probably via its role in vesicle-mediated transport: required for defense against fungal pathogens and for granulocyte colony-stimulating factor (GM-CSF) signaling pathway; possibly by regulating glycosylation and/or targeting of proteins contributing to the viability and migration of neutrophils.

Cellular Location

Endoplasmic reticulum membrane; Multi-pass membrane protein

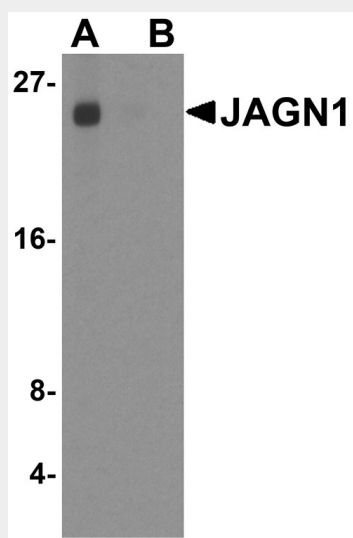
Tissue Location

Ubiquitously expressed.

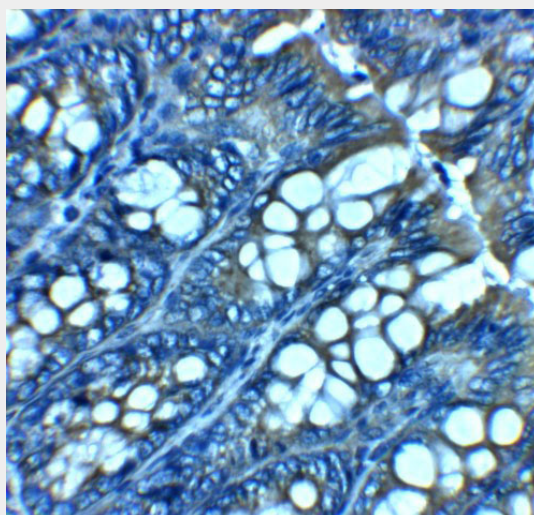
JAGN1 Antibody - Protocols

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](#)

JAGN1 Antibody - Images

Western blot analysis of JAGN1 in MCF7 cell lysate with JAGN1 antibody at 1 μ g/ml in (A) the absence and (B) the presence of blocking peptide.



Immunohistochemistry of JAGN1 in rat colon tissue with JAGN1 antibody at 2.5 µg/mL.

JAGN1 Antibody - Background

JAGN1 is the human ortholog of a gene originally identified in *Drosophila melanogaster*. It is a transmembrane protein that functions in the early secretory pathway and is necessary for neutrophil differentiation and survival. Individuals with mutations in the JAGN1 gene causes aberrant myeloid cell homeostasis and severe congenital neutropenia (SCN) (1). JAGN1-mutant granulocytes are characterized by ultrastructural defects, aberrant N-glycosylation of multiple proteins, and increased apoptosis (1). Mice lacking this gene could not mount an efficient neutrophil-dependent immune response to a human fungal pathogen (2).

JAGN1 Antibody - References

Boztug K, Jarvinen PM, Salzer E, et al. JAGN1 deficiency causes aberrant myeloid cell homeostasis and congenital neutropenia. *Nat. Genet.* 2014; 46:1021-7.
Wirnsberger G, Zwolanek F, Stadlmann J, et al. Jagunal homolog 1 is a critical regulator of neutrophil function in fungal host defense. *Nat. Genet.* 2014; 46:1028-33.