10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

PJA1 Antibody
Catalog # ASC11882

Specification

PJA1 Antibody - Product Information

Application	**WB, IHC-P, IF, E**
Primary Accession	Q8NG27
Other Accession	NP_660095, 41281725
Reactivity	**Human, Mouse, Rat**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**IgG**
Calculated MW	**Predicted: 71 kDa** **Observed: 71 kDa KDa**
Application Notes	**PJA1 antibody can be used for detection of PJA1 by Western blot at 1 - 2 µg/ml. Antibody can also be used for immunohistochemistry starting at 5 µg/mL. For immunofluorescence start at 20 µg/mL.**

PJA1 Antibody - Additional Information

Gene ID	**64219**

Target/Specificity
PJA1; PJA1 antibody is human, mouse and rat reactive. At least two isoforms of PJA1 are known to exist; this antibody will detect both isoforms.

Reconstitution & Storage
PJA1 antibody can be stored at 4℃ for three months and -20℃, stable for up to one year.

Precautions
PJA1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

PJA1 Antibody - Protein Information

Name PJA1

Synonyms RNF70

Function
Has E2-dependent E3 ubiquitin-protein ligase activity. Ubiquitinates MAGED1 antigen leading to its subsequent degradation by proteasome (By similarity). May be involved in protein sorting.

Tissue Location
Expressed in various regions of the brain including the cerebellum, cerebral cortex, medulla, occipital pole, frontal lobe, temporal lobe and putamen. Highest levels in the cerebral cortex

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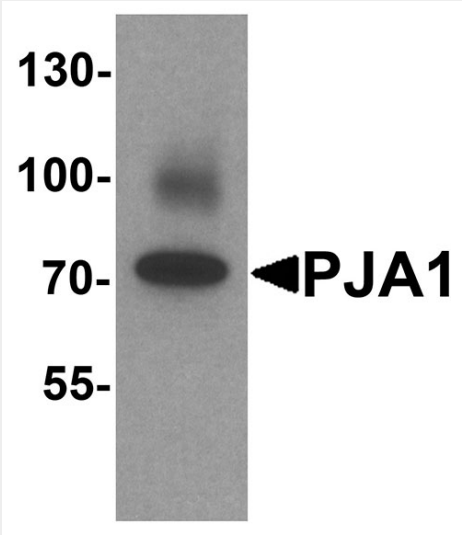
PJA1 Antibody - Protocols

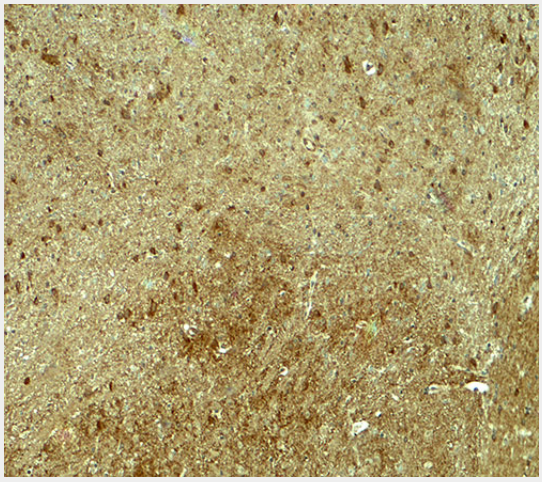
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

PJA1 Antibody - Images



Western blot analysis of PJA1 in human brain tissue lysate with PJA1 antibody at 1 µg/ml.



Immunohistochemistry of PJA1 in mouse brain tissue with PJA1 antibody at 5 µg/ml.

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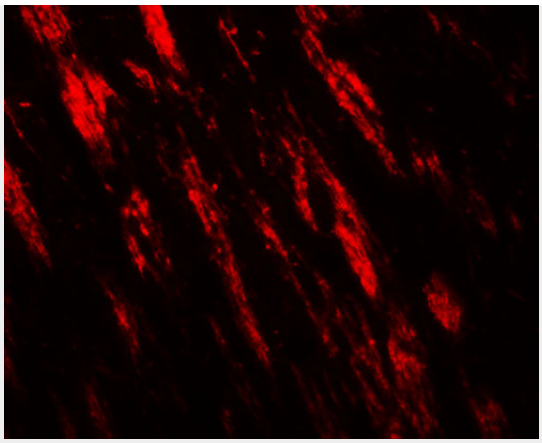

Immunofluorescence of PJA1 in mouse brain tissue with PJA1 antibody at 20 µg/ml.

PJA1 Antibody - Background

Ubiquitinization is an important cellular degradation process requiring sequential reactions that are mediated by three enzymes: E1, E2 and E3. PJA1, also known as Praja1 and RING finger protein 70, is a 643 amino acid E2-dependent E3-ubiquitin ligase that is abundantly expressed in the brain (1,2). Through interaction and activation with the E2-ubiquitin ligase UBC4, PJA1 mediates substrate-specific ubiquitination via its RING finger domain and facilitates ubiquitination (3). Overexpression of PJA1 in gastrointestinal cancers suggests that it may be responsible for the degradation of some anti-oncogenic proteins (4,5).

PJA1 Antibody - References

Yu P, Chen Y, Tagle DA, et al. PJA1, encoding a RING-H2 finger ubiquitin ligase, is a novel human X chromosome gene abundantly expressed in brain. Genomics 2002; 79:869-74.
Zoabi M, Sadeh R, de Bie P, et al. PRAJA1 is a ubiquitin ligase for the polycomb repressive complex 2 proteins. Biochem. Biophys. Res. Commun. 2011; 408:393-8.
Doyle JM, Gao J, Wang J, et al. MAGE-RING protein complexes comprise a family of E3 ubiquitin ligases. Mol. Cell 2010; 39:963-74.
Saha T, Vardhini D, Tang Y, et al. RING finger-dependent ubiquitination by PRAJA is dependent on TGF-beta and potentially defines the functional status of the tumor suppressor ELF. Oncogene 2006; 25:693-705.