

### **PJA1** Antibody

Catalog # ASC11882

#### **Specification**

### **PJA1 Antibody - Product Information**

Application WB, IHC-P, IF, E

Primary Accession <u>Q8NG27</u>

Other Accession
Reactivity
NP\_660095, 41281725
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  $\mu$ g/ml. Antibody can also be used for

immunohistochemistry starting at 5  $\mu$ g/mL. For immunofluorescence start at 20  $\mu$ g/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°C for three months and -20°C, 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

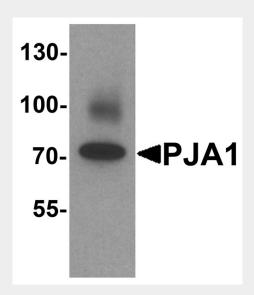


# **PJA1 Antibody - Protocols**

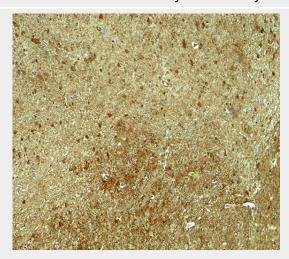
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

## PJA1 Antibody - Images

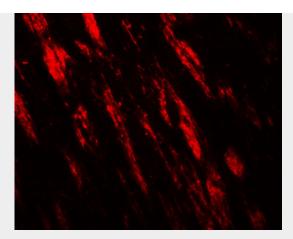


Western blot analysis of PJA1 in human brain tissue lysate with PJA1 antibody at 1  $\mu$ g/ml.



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





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.