

**IQSEC2 Antibody**  
Catalog # ASC11865**Specification**

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**IQSEC2 Antibody - Product Information**

Application	WB, IHC
Primary Accession	<a href="#">Q5JU85</a>
Other Accession	<a href="#">NP_001104595</a> , <a href="#">162138911</a>
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	Predicted: 104, 133, 141, 164 kDa

Application Notes	<b>Observed: 140 kDa KDa</b> IQSEC2 antibody can be used for detection of IQSEC2 by Western blot at 1 - 2 µg/ml. Antibody can also be used for immunohistochemistry starting at 5 µg/mL.
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**IQSEC2 Antibody - Additional Information**

Gene ID	23096
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**Target/Specificity**

IQSEC2; IQSEC2 antibody is human, mouse and rat reactive. At least two isoforms of IQSEC2 are known to exist; this antibody will only detect the larger isoform. IQSEC2 antibody is predicted to not cross-react with IQSEC1.

**Reconstitution & Storage**

IQSEC2 antibody can be stored at 4°C for three months and -20°C, stable for up to one year.

**Precautions**

IQSEC2 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

**IQSEC2 Antibody - Protein Information**

**Name** IQSEC2

**Synonyms** KIAA0522

**Function**

Is a guanine nucleotide exchange factor for the ARF GTP- binding proteins.

**Cellular Location**

Cytoplasm.

**Tissue Location**

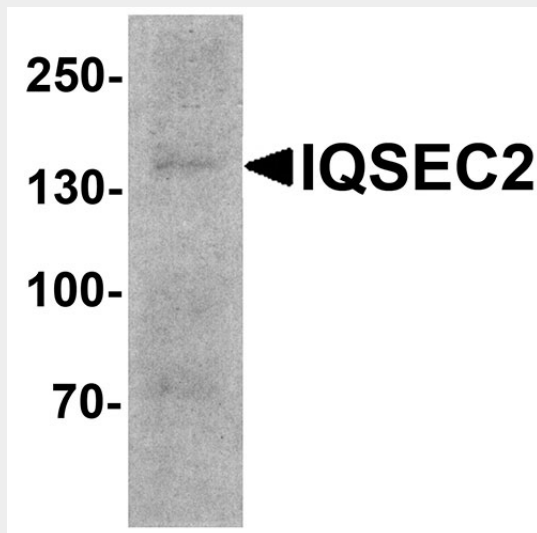
Expressed in brain, kidney and small intestine. Weakly expressed in placenta, pancreas, ovary, prostate and liver

### **IQSEC2 Antibody - Protocols**

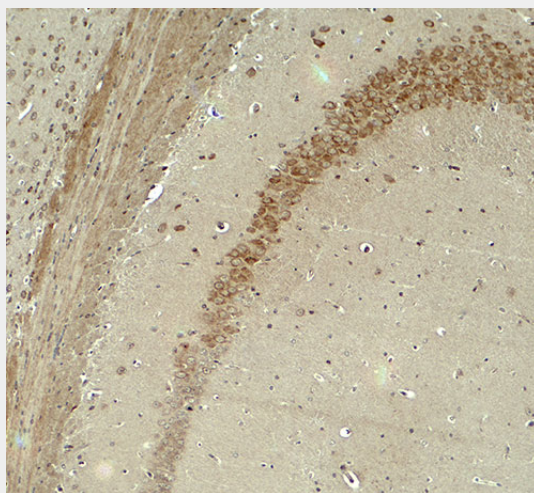
Provided below are standard protocols that you may find useful for product applications.

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

### **IQSEC2 Antibody - Images**



Western blot analysis of IQSEC2 in SK-N-SH cell lysate with IQSEC2 antibody at 1  $\mu$ g/ml.



Immunohistochemistry of IQSEC2 in mouse brain tissue with IQSEC2 antibody at 5  $\mu$ g/ml.

### **IQSEC2 Antibody - Background**

ADP ribosylation factors (Arfs) are small GTP-binding proteins known for their role in vesicular transport, where they nucleate the assembly of coat protein complexes at sites of carrier vesicle formation. Similar to the related protein IQSEC1, IQSEC2 is a guanine nucleotide exchange protein for ARF1 and ARF6 that belongs to the BRAG family and contains one IQ domain, one PH domain and one SEC7 domain (1,2). IQSEC2 is a major component of the postsynaptic density (PSD) and colocalizes with PSD-95. It has been suggested to modulate the functions of the ARF proteins (1). Mutations in this gene have been implicated in nonsyndromic X-linked mental retardation (3).

### **IQSEC2 Antibody - References**

Murphy JA, Jensen ON, and Walikonis RS. BRAG1, a SEC7 domain-containing protein, is a component of the postsynaptic density of excitatory synapses. *Brain Res.* 2006; 1120:35-45.  
Someya A, Sata M, Takeda K, et al. ARF-GEP(100), a guanine nucleotide-exchange protein for ADP-ribosy  
Shoubridge C, Tarpey PS, Abidi F, et al. Mutations in the guanine nucleotide exchange factor gene IQSEC2 cause nonsyndromic intellectual ability. *Nat. Genet.* 2010; 42:486-8.