

IQSEC2 Antibody

Catalog # ASC11865

Product Information

Application	WB, E, IHC-P
Primary Accession	Q5JU85
Other Accession	NP_001104595 , 162138911
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	162784
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	IQSEC2 antibody can be used for detection of IQSEC2 by Western blot at 1 - 2 μ g/ml. Antibody can also be used for immunohistochemistry starting at 5 μ g/mL.

Additional Information

Gene ID	23096
Other Names	IQ motif and SEC7 domain-containing protein 2, IQSEC2, KIAA0522
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.

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

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).

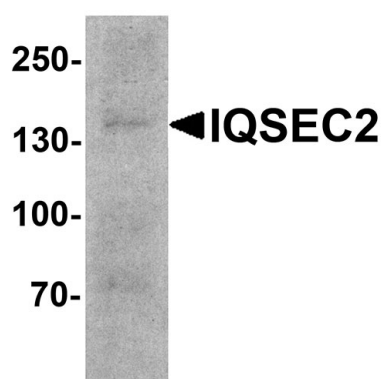
References

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.

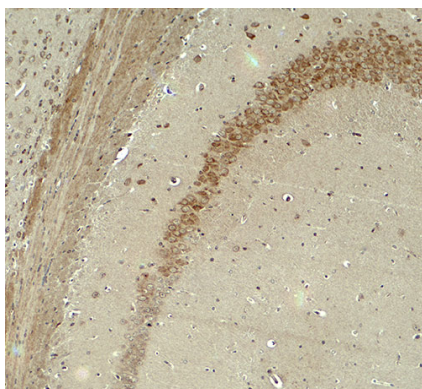
Someya A, Sata M, Takeda K, et al. ARF-GEP(100), a guanine nucleotide-exchange protein for ADP-ribosy

Shoubbridge C, Tarpey PS, Abidi F, et al. Mutations in the guanine nucleotide exchange factor gene IQSEC2 cause nonsyndromic intellectual disability. *Nat. Genet.* 2010; 42:486-8.

Images



Western blot analysis of IQSEC2 in SK-N-SH cell lysate with IQSEC2 antibody at 1 µg/ml.



Immunohistochemistry of IQSEC2 in mouse brain tissue with IQSEC2 antibody at 5 µg/ml.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.