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IQSEC1 Antibody
Catalog # ASC11864

Specification

IQSEC1 Antibody - Product Information

Application	**WB, IF, ICC, E**
Primary Accession	Q6DN90
Other Accession	NP_055684, 9922
Reactivity	**Human, Mouse, Rat**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**IgG**
Calculated MW	**Predicted: 106 kDa**
	Observed: 103 kDa KDa
Application Notes	**IQSEC1 antibody can be used for detection of IQSEC1 by Western blot at 1 - 2 µg/ml. Antibody can also be used for immunocytochemistry at 2 µg/mL. For immunofluorescence start at 2 µg/mL.**

IQSEC1 Antibody - Additional Information

Gene ID **9922**

Target/Specificity
IQSEC1 antibody was raised against a 19 amino acid peptide near the amino terminus of human IQSEC1.

The immunogen is located within amino acids 60 - 110 of IQSEC1.

Reconstitution & Storage
IQSEC1 antibody can be stored at 4℃ for three months and -20℃, stable for up to one year.

Precautions
IQSEC1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

IQSEC1 Antibody - Protein Information

Name IQSEC1 (HGNC:29112)

Function
Guanine nucleotide exchange factor for ARF1 and ARF6 (PubMed:11226253, PubMed:24058294). Guanine nucleotide exchange factor activity is enhanced by lipid binding (PubMed:24058294). Accelerates GTP binding by ARFs of all three classes. Guanine nucleotide exchange protein for ARF6, mediating internalization of beta-1 integrin (PubMed:16461286). Involved in neuronal development (Probable). In neurons, plays a role in the control of vesicle formation by endocytoc cargo. Upon long term depression, interacts

with GRIA2 and mediates the activation of ARF6 to internalize synaptic AMPAR receptors (By similarity).

Cellular Location
Cytoplasm. Nucleus. Postsynaptic density {ECO:0000250|UniProtKB:Q8R0S2}. Cytoplasmic vesicle, secretory vesicle, synaptic vesicle {ECO:0000250|UniProtKB:Q8R0S2}. Note=At steady state, may be preferentially cytosolic

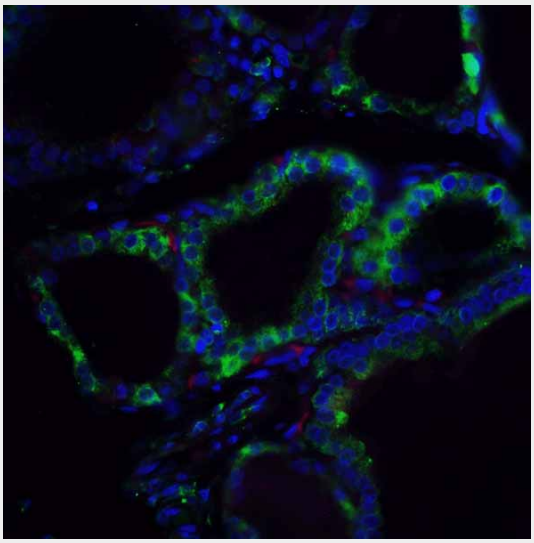
Tissue Location
Expressed in brain, ovary, heart, lung, liver, kidney and leukocytes. Moderate expression was also detected in lung, skeletal muscle, placenta, small intestine, pancreas, spleen and testis.

IQSEC1 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

IQSEC1 Antibody - Images



Immunofluorescence of RSPO1 in human spleen tissue with RSPO1 antibody at 5 µg/ml.

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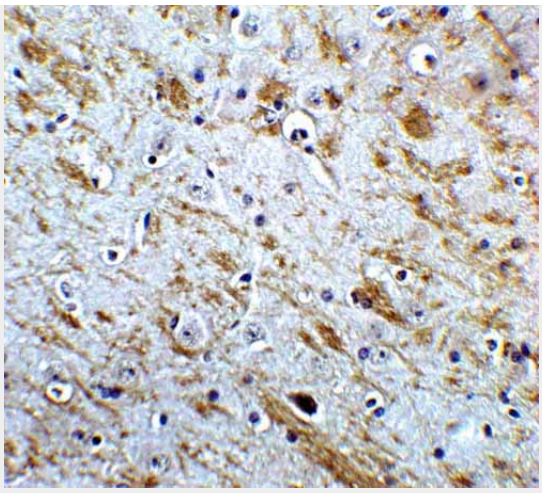

Immunohistochemistry of NELF in mouse brain tissue with NELF Antibodyat 5 µg/mL.

IQSEC1 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. IQSEC1 (GEP100/BRAG2), a guanine nucleotide exchange protein for ARF6, belongs to the BRAG family and contains one IQ domain, one PH domain and one SEC7 domain (1). As a known activator of ARF6, IQSEC1 regulates cell surface levels of Beta1 integrin and its knockdown blocked tumour metastasis (2,3). IQSEC1 links EGFR signaling to ARF6 activation and may contribute to the cancer metastasis and malignancy (4).

IQSEC1 Antibody - References

Someya A, Sata M, Takeda K, et al. ARF-GEP(100), a guanine nucleotide-exchange protein for ADP-ribosylation factor 6. Proc. Natl. Acad. Sci. U.S.A. 2001; 98:2413-8.
Dunphy JL, Moravec R, Ly K, et al. The Arf6 GEF GEP100/BRAG2 regulates cell adhesion by controlling endocytosis of beta1 integrins. Curr. Biol. 2006; 16:315-20.
Moravec R, Conger KK, D'Souza R, et al. BRAG2/GEP100/IQSec1 interacts with clathrin and regulates a5B1 integrin endocytosis through activation of ADP ribosylation factor 5 (Arf5). J. Biol. Chem. 2012; 287:31138-47.
Hu Z, Du J, Yang L, et al. GEP100/Arf6 is required for epidermal growth factor-induced ERK/Rac1 signaling and cell migration in human hepatoma HepG2 cells. PLoS One 2012; 7:e38777.