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GEP100/IQSEC1 Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP55358

Product Information

Application	WB, IHC-P, IHC-F, IF, ICC, E
Primary Accession	Q6DN90
Reactivity	Rat, Pig, Dog
Host	Rabbit
Clonality	Polyclonal
Calculated MW	108314
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human GEP100
Epitope Specificity	451-550/963
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Cytoplasm. Nucleus. At steady state, may be preferentially cytosolic.
SIMILARITY	Belongs to the BRAG family. Contains 1 IQ domain. Contains 1 PH domain. Contains 1 SEC7 domain.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	The ADP-ribosylation factor (ARF) protein family are structurally and functionally conserved members of the Ras superfamily of regulatory GTP-binding proteins. ARFs influence vesicle trafficking and signal transduction in eukaryotic cells. ARF6 plays a role in protein trafficking near the plasma membrane, including receptor recycling, cell adhesion and cell migration. ARF6 colocalizes with the ARF guanine nucleotide-exchange protein (GEP) BRAG2, also designated GEP100. BRAG2 is ubiquitously expressed as two isoforms, BRAG2a and BRAG2b, which can cycle between the cytoplasm and the nucleus. BRAG2, via its interaction with ARF6, is involved in the regulation of cell adhesion by controlling Integrin ∫1 endocytosis and E-cadherin redistribution. BRAG2 has also been shown to bind directly to Tyr1068/1086-phosphorylated EGFR to activate ARF6, which induces tumor invasion in MCF7 cells. Therefore, BRAG2 may contribute to the metastasis and malignancy of some breast cancer cells.

Additional Information

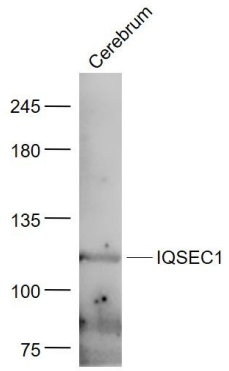
Gene ID	9922
Other Names	IQ motif and SEC7 domain-containing protein 1, ADP-ribosylation factors guanine nucleotide-exchange protein 100, ADP-ribosylation factors guanine nucleotide-exchange protein 2, Brefeldin-resistant Arf-GEF 2 protein, BRAG2, IQSEC1 (HGNC:29112)

Target/Specificity	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.
Dilution	WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,ICC=1:100-500,IF=1:100-500,ELISA=1:5000-10000
Format	0.01M TBS(pH7.4) with 1% BSA, 0.09% (W/V) sodium azide and 50% Glyce
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

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.

Images



Sample:
Cerebrum (Mouse) Lysate at 40 ug
Primary: Anti- GEP100/IQSEC1 (AP55358) at 1/300 dilution
Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution
Predicted band size: 108 kD
Observed band size: 108 kD