

BIG1 Rabbit pAb

BIG1 Rabbit pAb
Catalog # AP55005

Product Information

Application	WB
Primary Accession	Q9Y6D6
Reactivity	Mouse
Predicted	Rat, Pig, Dog, Human, Chicken, Sheep
Host	Rabbit
Clonality	Polyclonal
Calculated MW	208767
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human BIG1/ARFGEF1
Epitope Specificity	1-200/1849
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. Cytoplasm, perinuclear region. Golgi apparatus. Golgi apparatus, trans-Golgi network (By similarity). Nucleus. Nucleus, nucleolus. Nucleus matrix. Membrane. Note=Translocates from cytoplasm to membranes and nucleus upon cAMP treatment.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	Guanine nucleotide-exchange proteins (GEPs) accelerate replacement of bound GDP with GTP and thereby activate ADP-ribosylation factors (ARFs), a family of guanine nucleotide-binding proteins that play an important role in intracellular vesicular trafficking. GEPs comprise two major families, large GEPs that are inhibited by brefeldin A (BFA), a protein that effects Golgi structure and a group of smaller GEPs that are insensitive to BFA. Two genes for GEPs found on human chromosomes 8 and 20 encode BFA sensitive GEPs designated BIG1 and BIG2. Both GEPs contain a sec7 domain that is responsible for their brefeldin inhibition and also their catalytic activity. In vivo, BIG1 and BIG2 exist in macromolecular complexes that move between the Golgi membranes and cytosol. BIG2 associates with PKA regulatory subunits, implying that BIG2 may act as an A kinase-anchoring protein (AKAP) that could coordinate the cAMP and ARF regulatory pathways.

Additional Information

Gene ID	10565
Other Names	Brefeldin A-inhibited guanine nucleotide-exchange protein 1, Brefeldin A-inhibited GEP 1, ADP-ribosylation factor guanine nucleotide-exchange factor 1, p200 ARF guanine nucleotide exchange factor, p200 ARF-GEP1, ARFGEF1, ARFGEF1, BIG1

Dilution	WB=1:500-2000
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.

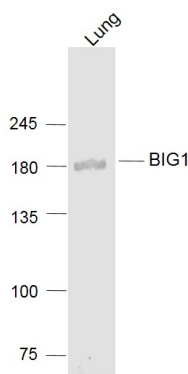
Protein Information

Name	ARFGEF1
Synonyms	ARFGEF1, BIG1
Function	Promotes guanine-nucleotide exchange on ARF1 and ARF3. Promotes the activation of ARF1/ARF3 through replacement of GDP with GTP. Involved in vesicular trafficking. Required for the maintenance of Golgi structure; the function may be independent of its GEF activity. Required for the maturation of integrin beta-1 in the Golgi. Involved in the establishment and persistence of cell polarity during directed cell movement in wound healing. Proposed to act as A kinase-anchoring protein (AKAP) and may mediate crosstalk between Arf and PKA pathways. Inhibits GAP activity of MYO9B probably through competitive RhoA binding. The function in the nucleus remains to be determined.
Cellular Location	Cytoplasm. Cytoplasm, perinuclear region. Golgi apparatus. Golgi apparatus, trans-Golgi network membrane. Nucleus Nucleus, nucleolus. Nucleus matrix. Note=Translocates from cytoplasm to membranes and nucleus upon cAMP treatment
Tissue Location	Expressed in placenta, lung, heart, brain, kidney and pancreas

Background

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

Images



Sample:
 Lung (Mouse) Lysate at 40 ug
 Primary: Anti- BIG1 (AP55005) at 1/1000 dilution
 Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution
 Predicted band size: 209 kD
 Observed band size: 209 kD

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