



BIG2 Polyclonal Antibody

Catalog No	YP-Ab-16144
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	WB;IHC;IF;ELISA
Gene Name	ARFGEF2
Protein Name	Brefeldin A-inhibited guanine nucleotide-exchange protein 2
Immunogen	The antiserum was produced against synthesized peptide derived from human ARFGEF2. AA range:1491-1540
Specificity	BIG2 Polyclonal Antibody detects endogenous levels of BIG2 protein.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Polyclonal, Rabbit,IgG
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. Immunofluorescence: 1/200 - 1/1000. ELISA: 1/20000. Not yet tested in other applications.
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	ARFGEF2; ARFGEP2; BIG2; Brefeldin A-inhibited guanine nucleotide-exchange protein 2; Brefeldin A-inhibited GEP 2; ADP-ribosylation factor guanine nucleotide-exchange factor 2
Observed Band	210kD
Cell Pathway	Cytoplasm. Membrane. Golgi apparatus. Cytoplasm, perinuclear region. Golgi apparatus, trans-Golgi network . Endosome . Cytoplasm, cytoskeleton, microtubule organizing center, centrosome. Cell projection, dendrite . Cytoplasmic vesicle . Cell junction, synapse . Cytoplasm, cytoskeleton . Translocates from cytoplasm to membranes upon cAMP treatment. Localized in recycling endosomes.
Tissue Specificity	Expressed in placenta, lung, heart, brain, kidney and pancreas.
Function	disease:Defects in ARFGEF2 are the cause of autosomal recessive periventricular nodular heterotopia type 2 (PVNH2) [MIM:608097]; also called periventricular heterotopia with microcephaly autosomal recessive. PVNH2 is an autosomal recessive form characterized by microcephaly (small brain), severe developmental delay and recurrent infections. No anomalies extrinsic to the central nervous system, such as dysmorphic features or grossly abnormal endocrine or other conditions, are associated with PVNH2.,enzyme



regulation:Inhibited by brefeldin A.,function:Promotes guanine-nucleotide exchange on ARF1, ARF5 and ARF6. Promotes the activation of ARF1/ARF5/ARF6 through replacement of GDP with GTP.,PTM:Phosphorylated upon DNA damage, probably by ATM or ATR.,similarity:Contains 1 SEC7 domain.,tissue specificity:Expressed in placenta, lung, heart, brain, kidney and pancreas.,

Background

ADP-ribosylation factors (ARFs) play an important role in intracellular vesicular trafficking. The protein encoded by this gene is involved in the activation of ARFs by accelerating replacement of bound GDP with GTP and is involved in Golgi transport. It contains a Sec7 domain, which may be responsible for its guanine-nucleotide exchange activity and also brefeldin A inhibition. [provided by RefSeq, Jul 2008],

matters needing attention

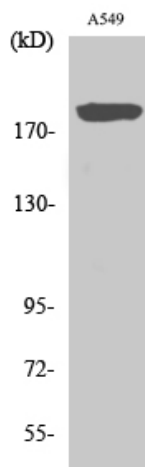
Avoid repeated freezing and thawing!

Usage suggestions

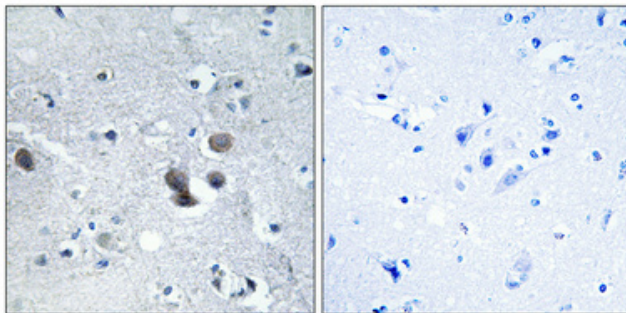
This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.



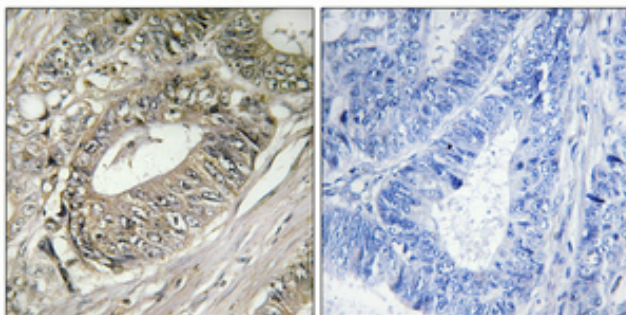
Products Images



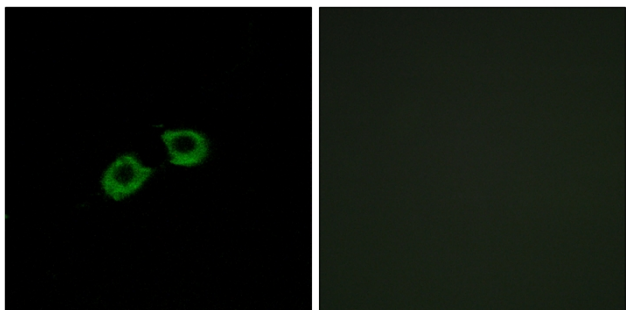
Western Blot analysis of various cells using BIG2 Polyclonal Antibody



Immunohistochemical analysis of paraffin-embedded Human brain. Antibody was diluted at 1:100(4° overnight). High-pressure and temperature Tris-EDTA, pH8.0 was used for antigen retrieval. Negative control (right) obtained from antibody was pre-absorbed by immunogen peptide.



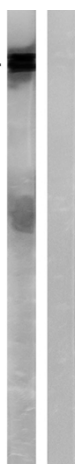
Immunohistochemical analysis of paraffin-embedded Human colon cancer. Antibody was diluted at 1:100(4° overnight). High-pressure and temperature Tris-EDTA, pH8.0 was used for antigen retrieval. Negative control (right) obtained from antibody was pre-absorbed by immunogen peptide.



Immunofluorescence analysis of A549 cells, using ARFGEF2 Antibody. The picture on the right is blocked with the synthesized peptide.



ARFGEF2 --



-- 170

-- 130

-- 95

-- 72

-- 55

(KD)

Western blot analysis of lysates from A549 cells, using ARFGEF2 Antibody. The lane on the right is blocked with the synthesized peptide.