



Rabbit Anti-BIG1 antibody

SL12866R

Product Name:	BIG1
Chinese Name:	ARF鸟苷酸交换因子BIG1抗体
Alias:	ARFGEF1; ADPRibosylation factor guanine nucleotide exchange factor 1(brefeldin A inhibited); ARFGEP1; Brefeldin A inhibited GEP 1; Brefeldin A inhibited guanine nucleotide exchange protein 1; p200 ARF GEP1; p200 ARF guanine nucleotide exchange factor; BIG1 HUMAN.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Chicken,Dog,Pig,Cow,Sheep,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	209kDa
Cellular localization:	The nucleuscytoplasmicThe cell membrane
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human BIG1/ARFGEF1:1-200/1849
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. 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.
PubMed:	PubMed
Product Detail:	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.

Function:

BIG1 is a brefeldin A-inhibited guanine nucleotide exchange protein (GEP) that activates ADP-ribosylation factor (ARF) GTPases and functions in vesicle formation from Golgi membranes.

Subunit:

Homodimer (Probable). Interacts with BIG1; both proteins are probably part of the same or very similar macromolecular complexes. Interacts with FKBP2, DPY30, MYO9B, PRKAR1A, PRKAR2A, PPP1CC and PDE3A. Interacts with KANK1; however, colocalization cannot be experimentally confirmed. Interacts with NCL, FBL, NUP62 and U3 small nucleolar RNA.

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.

Tissue Specificity:

Expressed in placenta, lung, heart, brain, kidney and pancreas.

Post-translational modifications:

Phosphorylated. In vitro phosphorylated by PKA reducing its GEF activity and dephosphorylated by phosphatase PP1.

Similarity:

Contains 1 SEC7 domain

SWISS:

Q9Y6D6

Gene ID:

10565

Database links:

[Entrez Gene: 10565](#)Human

[Entrez Gene: 211673](#)Mouse

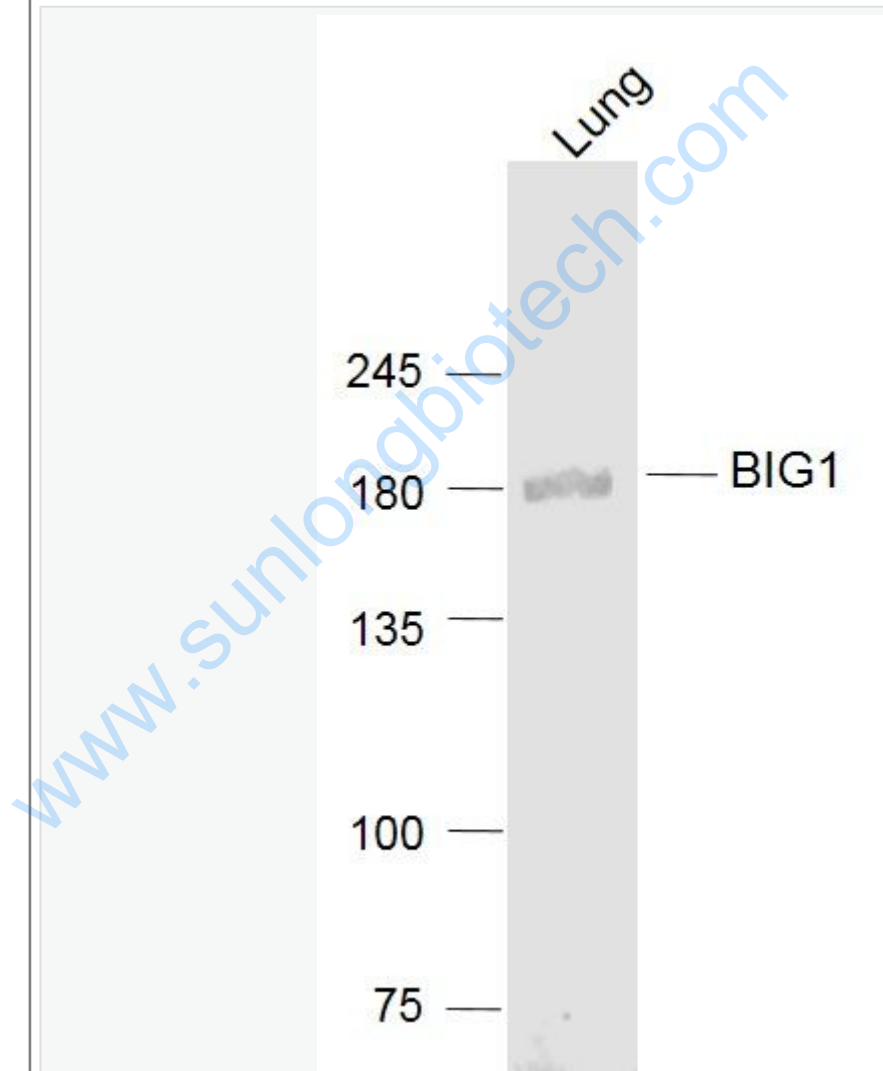
[Omid: 604141](#)Human

[SwissProt: Q9Y6D6](#)Human

Important Note:

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

Picture:



Sample:

Lung (Mouse) Lysate at 40 ug

Primary: Anti- BIG1 (SL12866R) at 1/1000 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 209 kD

Observed band size: 209 kD

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