

KO-Validated Anti-ARFGEF2 Rabbit Monoclonal Antibody Rabbit monoclonal antibody Catalog # AGI2443

Specification

KO-Validated Anti-ARFGEF2 Rabbit Monoclonal Antibody - Product Information

Application Primary Accession Reactivity Clonality Isotype Calculated MW	WB, FC, ICC <u>Q9Y6D5</u> Rat, Human, Mouse Monoclonal Rabbit IgG Predicted, 202 kDa; observed, 230 kDa KDa
Gene Name Aliases	ARFGEF2 ARFGEF2; ADP Ribosylation Factor Guanine Nucleotide Exchange Factor 2; BIG2; Brefeldin A-Inhibited Guanine Nucleotide-Exchange Protein 2; ADP-Ribosylation Factor Guanine Nucleotide-Exchange Factor 2 (Brefeldin A-Inhibited); Brefeldin A-Inhibited GEP; ADP-Ribosylation Factor Guanine Nucleotide-Exchange Factor; DJ1164I10.1; ARFGEP2; PVNH2
Immunogen	A synthesized peptide derived from human ARFGEF2

KO-Validated Anti-ARFGEF2 Rabbit Monoclonal Antibody - Additional Information

Gene ID 10564 Other Names Brefeldin A-inhibited guanine nucleotide-exchange protein 2, Brefeldin A-inhibited GEP 2, ADP-ribosylation factor guanine nucleotide-exchange factor 2, ARFGEF2, ARFGEP2, BIG2

KO-Validated Anti-ARFGEF2 Rabbit Monoclonal Antibody - Protein Information

Name ARFGEF2

Synonyms ARFGEP2, BIG2

Function

Promotes guanine-nucleotide exchange on ARF1 and ARF3 and to a lower extent on ARF5 and ARF6. Promotes the activation of ARF1/ARF5/ARF6 through replacement of GDP with GTP. Involved in the regulation of Golgi vesicular transport. Required for the integrity of the endosomal compartment. Involved in trafficking from the trans-Golgi network (TGN) to endosomes and is required for membrane association of the AP-1 complex and GGA1. Seems to be involved in recycling of the transferrin receptor from recycling endosomes to the plasma membrane. Probably is involved in the exit of GABA(A) receptors from the endoplasmic reticulum. Involved in



constitutive release of tumor necrosis factor receptor 1 via exosome-like vesicles; the function seems to involve PKA and specifically PRKAR2B. Proposed to act as A kinase-anchoring protein (AKAP) and may mediate crosstalk between Arf and PKA pathways.

Cellular Location

Cytoplasm. Membrane. Golgi apparatus. Cytoplasm, perinuclear region. Golgi apparatus, trans-Golgi network Endosome. Cytoplasm, cytoskeleton, microtubule organizing center, centrosome. Cell projection, dendrite Cytoplasmic vesicle. Synapse. Cytoplasm, cytoskeleton. Note=Translocates from cytoplasm to membranes upon cAMP treatment. Localized in recycling endosomes

Tissue Location

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

KO-Validated Anti-ARFGEF2 Rabbit Monoclonal Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

KO-Validated Anti-ARFGEF2 Rabbit Monoclonal Antibody - Images



Western blotting analysis using anti-ARFGEF2 antibody (Cat#AGI2443). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-ARFGEF2 antibody (Cat#AGI2443, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.





Western blotting analysis using anti-ARFGEF2 antibody (Cat#AGI2443). ARFGEF2 expression in wild-type (WT) and ARFGEF2 knockout (KO) HSHC cells with 20 μ g of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with anti-ARFGEF2 antibody (Cat#AGI2443, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.



ARFGEF2-Alexa Fluor® 647

Flow cytometric analysis of ARFGEF2 expression in HepG2 cells using anti-ARFGEF2 antibody (Cat#AGI2443, 1:2,000). Green, isotype control; red, ARFGEF2.



Immunocytochemical staining of HepG2 cells with anti-ARFGEF2 antibody (Cat#AGI2443, 1:1,000). Nuclei were stained blue with DAPI; ARFGEF2 was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: Medium. Scale bar, 20 µm.