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Anti-GGA1 (RABBIT) Antibody
GGA1 Antibody
Catalog # ASR5295

Specification

Anti-GGA1 (RABBIT) Antibody - Product Information

Host	**Rabbit**
Conjugate	**Unconjugated**
Target Species	**Human**
Reactivity	**Human**
Clonality	**Polyclonal**
Application	**WB, E, IP, I, LCI**
Application Note	**This affinity purified antibody has been tested for use in ELISA and western blot. Specific conditions for reactivity should be optimized by the end user. Expect bands at 70 kDa in size corresponding to GGA1 by western blotting in the appropriate cell lysate or extract.**
Physical State	**Liquid (sterile filtered)**
Buffer	**0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2**
Immunogen	**This affinity-purified antibody was prepared from whole rabbit serum produced by repeated immunizations with a synthetic peptide corresponding to an internal region near amino acids 330-360 of Human GGA-1.**
Preservative	**0.01% (w/v) Sodium Azide**

Anti-GGA1 (RABBIT) Antibody - Additional Information

Gene ID 26088

Other Names
26088

Purity
This affinity purified antibody is directed against human GGA1 protein. The product was affinity purified from monospecific antiserum by immunoaffinity purification. A BLAST analysis was used to suggest reactivity with this protein from human based on 100% homology for the immunogen sequence. Cross reactivity may occur with GGA1 from bovine (87% homology), mouse (82% homology) and rat (76% homology) sources. The immunizing sequence is present only in isoform 1 of this protein, therefore cross reactivity with splice variants is not expected. Cross reactivity with GGA1 homologues from other sources has not been determined.

Storage Condition
Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted

liquid. Dilute only prior to immediate use.

Precautions Note
This product is for research use only and is not intended for therapeutic or diagnostic applications.

Anti-GGA1 (RABBIT) Antibody - Protein Information

Name GGA1

Function
Plays a role in protein sorting and trafficking between the trans-Golgi network (TGN) and endosomes. Mediates the ARF-dependent recruitment of clathrin to the TGN and binds ubiquitinated proteins and membrane cargo molecules with a cytosolic acidic cluster-dileucine (DXXLL) motif (PubMed:11301005, PubMed:15886016). Mediates export of the GPCR receptor ADRA2B to the cell surface (PubMed:27901063). Required for targeting PKD1:PKD2 complex from the trans-Golgi network to the cilium membrane (By similarity). Regulates retrograde transport of proteins such as phosphorylated form of BACE1 from endosomes to the trans-Golgi network (PubMed:15615712, PubMed:15886016).

Cellular Location
Golgi apparatus, trans-Golgi network membrane; Peripheral membrane protein. Endosome membrane; Peripheral membrane protein Early endosome membrane; Peripheral membrane protein

Tissue Location
Ubiquitously expressed.

Anti-GGA1 (RABBIT) Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-GGA1 (RABBIT) Antibody - Images

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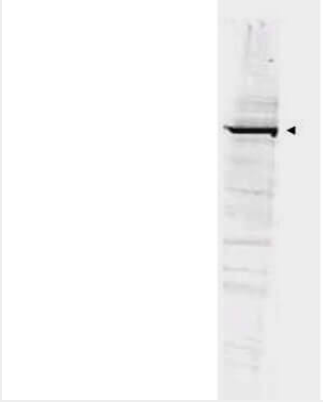

Western blot using Rockland's Affinity Purified anti-GGA1 antibody shows detection of bands at ~100 kDa corresponding to YFP-GGA1 fusion present in a lysate of HEK293 cells over- expressing the recombinant protein (arrowhead). Approximately 35 µg of lysate was separated on a 4-20% gel by SDS-PAGE and transferred onto nitrocellulose. After blocking the membrane was probed with the primary antibody diluted to 1:1,350. Reaction occurred overnight at 4° followed by washes and reaction with a 1:10,000 dilution of IRDye™800 conjugated Gt anti-Rb for 45 min at room temperature. IRDye™800 fluorescence image was captured using the Odyssey® Infrared Imaging System developed by LI-COR. IRDye is a trademark of LI-COR, Inc. Other detection systems will yield similar results.

Anti-GGA1 (RABBIT) Antibody - Background

GGA1 (also known as ADP-ribosylation factor binding protein, Golgi-localized, gamma ear-containing, ARF-binding protein 1, Gamma-adaptin related protein 1) plays a role in protein sorting and trafficking between the trans-Golgi network (TGN) and endosomes. This protein mediates the ARF-dependent recruitment of clathrin to the TGN and binds ubiquitinated proteins and membrane cargo molecules with a cytosolic acidic cluster-dileucine (AC-LL) motif. GGA1 is a monomeric protein that interacts with NECAP1, GGA2 and GGA3 as well as RABEP1, RABGEF1 and type-I membrane proteins SORT1, SORL1, LRP3, M6PR/CD-MPR, IGF2R/CI-MPR and BACE1. GGA1 is a ubiquitously membrane-associated protein that is localized to TGN and endosomes. Multiple alternatively spliced transcript variants encoding different isoforms have been found for this gene.