

Anti-GGA3 Antibody

Catalog Number: A03641

About GGA3

GGA3 (also known as ADP-ribosylation factor binding protein GGA3, Golgi-localized, gamma ear-containing, ARF-binding protein 3, Gamma-adaptin related protein 3) 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 SORT1, SORL1, LRP3, GGA binding partner (GGABP) and P200, GGA1 and GGA2 as well as RABEP1, RABGEF1 and type-I membrane proteins M6PR/CD-MPR, IGF2R/CI-MPR and BACE1. GGA3 is a ubiquitously expressed membrane-associated protein that is localized to TGN and endosomes. Multiple alternatively spliced transcript variants encoding different isoforms have been found for this gene.

Overview

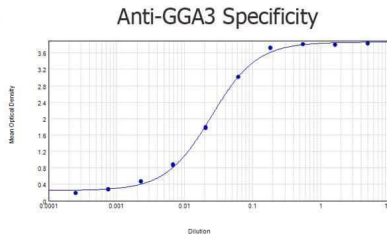
Product Name	Anti-GGA3 Antibody
Reactive Species	Human, Chimpanzee
Description	Boster Bio Anti-GGA3 Antibody (Catalog # A03641). Tested in ELISA, WB applications. This antibody reacts with Human, Chimpanzee.
Conjugate	HRP
Application	ELISA, IP, WB
Clonality	Polyclonal
Formulation	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2, 0.01% (w/v) Sodium Azide
Storage Instructions	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. Expiration date is one (1) year from date of opening. (Ship on dry ice.)
Host	Rabbit
Uniprot ID	Q9NZ52

Technical Details

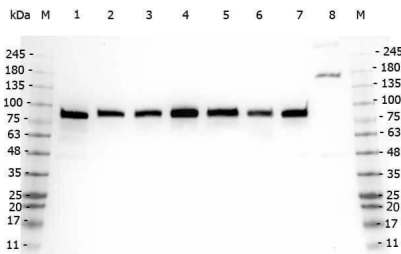
Immunogen	This affinity-purified antibody was prepared from whole rabbit serum produced by repeated immunizations with a synthetic peptide corresponding to an internal region near amino acids 400-425 of Human GGA3.
Predicted Reactive Species	Canine
Cross Reactivity	No cross reactivity with other proteins.

Isotype	IgG
Form	Liquid (sterile filtered)
Concentration	1.0mg/mL by UV absorbance at 280 nm
Purification	This affinity purified antibody is directed against human GGA3 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 and chimpanzee based on 100% homology for the immunogen sequence. Cross-reactivity may occur with GGA3 from macaque (93% homology) and orangutan (87% homology) sources. The immunizing sequence is present on both the long (isoform 1) and short (isoform 2) transcript variants for this protein.
Suggested Dilutions	ELISA: 1:10,000 - 1:50,000 IP: 1:100 WB: 1:500 - 1:3,000 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 78 kDa in size corresponding to GGA3 by western blotting in the appropriate cell lysate or extract.

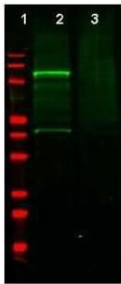
Anti-GGA3 Antibody (A03641) Images



ELISA results of purified Rabbit anti-GGA3 Antibody tested against BSA-conjugated peptide of immunizing peptide. Each well was coated in duplicate with 0.1µg of conjugate. The starting dilution of antibody was 5ug/ml and the X-axis represents the Log10 of a 3-fold dilution. This titration is a 4-parameter curve fit where the IC50 is defined as the titer of the antibody. Assay performed using 3% fish gel, Goat anti-Rabbit IgG Antibody Peroxidase Conjugated (Min X Bv Ch Gt GP Ham Hs Hu Ms Rt & Sh Serum Proteins) and TMB ELISA Peroxidase Substrate .



Western Blot of Rabbit anti-GGA3 antibody. Marker: Opal Pre-stained ladder . Lane 1: HEK293 lysate . Lane 2: HeLa Lysate . Lane 3: MCF-7 Lysate . Lane 4: Jurkat Lysate . Lane 5: A431 Lysate . Lane 6: LNCaP Lysate . Lane 7: A-172 Lysate . Lane 8: NIH/3T3 Lysate . Load: 35 µg per lane. Primary antibody: GGA3 antibody at 1:5,000 for overnight at 4°C. Secondary antibody: Peroxidase rabbit secondary antibody at 1:30,000 for 60 min at RT. Blocking Buffer: 1% Casein-TTBS (MB-082) for 30 min at RT. Predicted/Observed size: 78 kDa for GGA3.



Western blot using Boster's Affinity Purified anti-GGA3 antibody shows detection of a band at ~110 kDa corresponding to GFP-GGA3 fusion protein present in a lysate of HEK293 cells over-expressing the recombinant protein (lane 2, arrowhead). Pre-incubation of antibody with immunizing peptide blocks specific staining (lane 3). MW markers are shown in lane 1 (700 nm channel - red). Approximately 35 µg of lysate was separated on a 16% Tricine gel by SDS-PAGE and transferred onto nitrocellulose. After blocking the membrane was probed with the primary antibody diluted to 1:600. Reaction occurred overnight at 4°C followed by washes and reaction with a 1:10,000 dilution of IRDye800 conjugated Gt-a-Rabbit IgG [H&L] (611-132-122) for 45 min at room temperature (800 nm channel - green). IRDye800 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.

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Anti-GGA3 Antibody

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