

Datasheet for 600-401-893**GGA3 Antibody****Overview**

Description:	Anti-GGA3 (RABBIT) Antibody - 600-401-893
Item No.:	600-401-893
Size:	100 µg
Applications:	ELISA, WB
Reactivity:	Human, Chimpanzee
Host Species:	Rabbit

Product Details

Background:	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.
Synonyms:	rabbit anti-GGA3 antibody, GGA-3, GGA 3, ADP-ribosylation factor-binding protein GGA3, Golgi-localized gamma ear-containing ARF-binding protein 3
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	GGA3
Reactivity:	Human, Chimpanzee
Immunogen Type:	Conjugated Peptide

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.
Purity/Specificity:	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.
Relevant Links:	• UniProtKB - Q9NZ52 • NCBI - 20336267 • GenelD - 23163

Application Details

Tested Applications:	ELISA, WB
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 78 kDa in size corresponding to GGA3 by western blotting in the appropriate cell lysate or extract.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:10,000 - 1:50,000
IP:	1:100
WB:	1:500 - 1:3,000

Formulation

Physical State:	Liquid (sterile filtered)
Concentration:	1.0mg/mL by UV absorbance at 280 nm
Buffer:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Preservative:	0.01% (w/v) Sodium Azide
Stabilizer:	None

Shipping & Handling

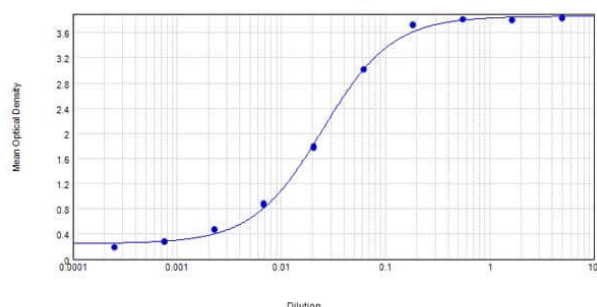
Shipping Condition:	Dry Ice
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Storage Condition: Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing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

Expiration: Expiration date is one (1) year from date of receipt.

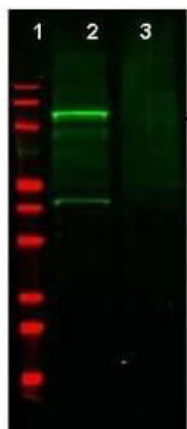
Images

Anti-GGA3 Specificity



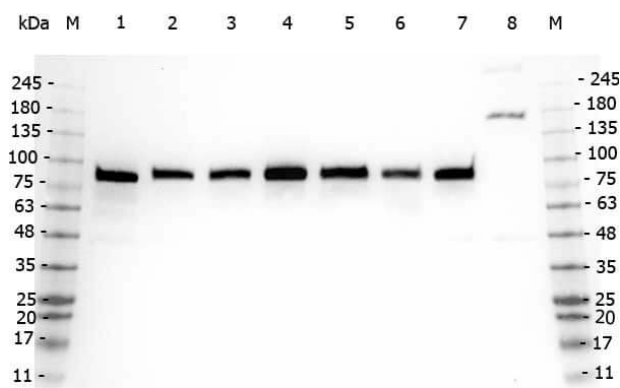
ELISA

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 5µg/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) (p/n 611-103-122) and TMB ELISA Peroxidase Substrate (p/n TMBE-1000).



Western Blot

Western blot using Rockland'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.



Western Blot

Western Blot of Rabbit anti-GGA3 antibody. Marker: Opal Pre-stained ladder (p/n MB-210-0500). Lane 1: HEK293 lysate (p/n W09-000-365). Lane 2: HeLa Lysate (p/n W09-000-364). Lane 3: MCF-7 Lysate (p/n W09-000-360). Lane 4: Jurkat Lysate (p/n W09-000-370). Lane 5: A431 Lysate (p/n W09-000-361). Lane 6: LNCaP Lysate (p/n W09-001-GJ9). Lane 7: A-172 Lysate (p/n W09-001-GL5). Lane 8: NIH/3T3 Lysate (p/n W10-000-358). Load: 35 µg per lane. Primary antibody: GGA3 antibody at 1:5,000 for overnight at 4°C. Secondary antibody: Peroxidase rabbit secondary antibody (p/n 611-103-122) 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.

Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.