abcam

Product datasheet

Anti-GGA3 antibody [EPR14340] - BSA and Azide free ab250282

Recombinant RabMAb

4 Images

Overview

Immunogen

Product name Anti-GGA3 antibody [EPR14340] - BSA and Azide free

Description Rabbit monoclonal [EPR14340] to GGA3 - BSA and Azide free

Host species Rabbit

Tested applications Suitable for: IHC-P, Flow Cyt (Intra), WB

Reacts with: Human **Species reactivity**

Predicted to work with: Mouse, Rat

Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.

General notes ab250282 is the carrier-free version of ab180951.

> Our carrier-free antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for increased conjugation efficiency.

This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cellbased assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.

Use our conjugation kits for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.

This product is compatible with the Maxpar® Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar[®] is a trademark of Fluidigm Canada Inc.

This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility
- Improved sensitivity and specificity
- Long-term security of supply
- Animal-free production

For more information see here.

Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb**® **patents**.

Properties

Form Liquid

Storage instructions Shipped at 4°C. Store at +4°C. Do Not Freeze.

Storage buffer pH: 7.2

Constituent: PBS

Carrier free Yes

Purity Affinity purified

Clonality Monoclonal

Clone number EPR14340

Isotype IgG

Applications

The Abpromise guarantee Our Abpromise guarantee covers the use of ab250282 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
IHC-P		Use at an assay dependent concentration. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.
Flow Cyt (Intra)		Use at an assay dependent concentration.
WB		Use at an assay dependent concentration. Predicted molecular weight: 78 kDa.

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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

(AC-LL) motif.

Tissue specificity Ubiquitously expressed.

Sequence similarities Belongs to the GGA protein family.

Contains 1 GAE domain. Contains 1 GAT domain. Contains 1 VHS domain.

Domain The VHS domain functions as a recognition module for sorting signals composed of an acidic

cluster followed by two leucines (AC-LL motif).

The GAT domain is responsible for interaction with ARF-GTP, UBC and RABEP1. Required for

recruitment to the TGN it prevents ARF-GTP hydrolysis.

The unstructured hinge region contains clathrin-binding and an autoinhibitory (AC-LL) motifs.

The GAE domain binds accessory proteins regulating GGAs function.

Post-translational Phosphorylated by CK2 and dephosphorylated by PP2A (By similarity). Phosphorylation of GGA3

modifications

allows the internal AC-LL motif to bind the VHS domain and to inhibit the recognition of cargo

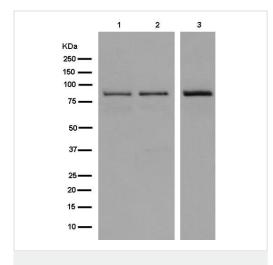
signals.

Ubiquitinated.

Cellular localization

Golgi apparatus > trans-Golgi network membrane. Endosome membrane.

Images



Western blot - Anti-GGA3 antibody [EPR14340] - BSA and Azide free (ab250282)

All lanes : Anti-GGA3 antibody [EPR14340] (<u>ab180951</u>) at 1/5000 dilution

Lane 1: SH-SY5Y cell lysate

Lane 2: 293 cell lysate

Lane 3: A431 cell lysate

Lysates/proteins at 20 µg per lane.

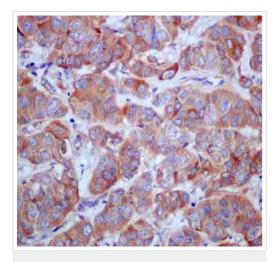
Secondary

All lanes : Peroxidase conjugated goat anti-rabbit lgG, (H+L) at 1/1000 dilution

Predicted band size: 78 kDa

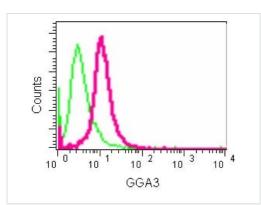
This data was developed using <u>ab180951</u>, the same antibody clone in a different buffer formulation.

Blocking and dilution buffer: 5% NFDM/TBST.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-GGA3 antibody [EPR14340] - BSA and Azide free (ab250282)

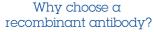
This data was developed using ab180951, the same antibody clone in a different buffer formulation.lmmunohistochemical analysis of paraffin-embedded Human lifiltrating duct carcinoma of breast tissue labeling GGA3 using ab180951 at a 1/50 dilution, and counterstained with Hematoxylin. Prediluted (ready to use) HRP Polymer for Rabbit IgG was used as a secondary antibody. Perform heat mediated antigen retrieval with EDTA buffer pH 9 before commencing with IHC staining protocol.



Flow Cytometry (Intracellular) - Anti-GGA3 antibody [EPR14340] - BSA and Azide free (ab250282)

This data was developed using ab180951, the same antibody clone in a different buffer formulation.

Intracellular flow cytometric analysis of 2% paraformaldehyde fixed SH-SY5Y cells labeling GGA3 using ab180951 at a 1/20 dilutioin, or Rabbit monoclonal IgG (isotype control). Goat anti rabbit IgG (FITC) at a 1/50 dilution was used as a secondary antibody.





Research with confidence Consistent and reproducible results



Long-term and scalable supply Recombinant technology





Success from the Ethical standards first experiment Confirmed specificity

compliant Animal-free

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