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GGA1 Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP2316a

Specification

GGA1 Antibody (N-term) - Product Information

Application	**IF, WB,E**
Primary Accession	Q9UJY5
Other Accession	Q8R0H9
Reactivity	**Human, Mouse**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Antigen Region	**1-30**

GGA1 Antibody (N-term) - Additional Information

Gene ID 26088

Other Names
ADP-ribosylation factor-binding protein GGA1, Gamma-adaptin-related protein 1, Golgi-localized, gamma ear-containing, ARF-binding protein 1, GGA1

Target/Specificity
This GGA1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 1-30 amino acids from the N-terminal region of human GGA1.

Dilution
IF~~1:10~50
WB~~1:1000

Format
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

Storage
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
GGA1 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

GGA1 Antibody (N-term) - 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:15886016, PubMed:15615712).

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

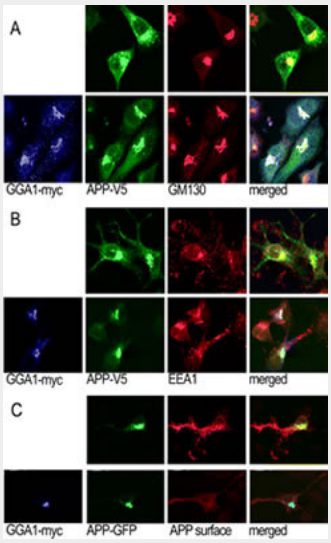
Tissue Location
Ubiquitously expressed.

GGA1 Antibody (N-term) - 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

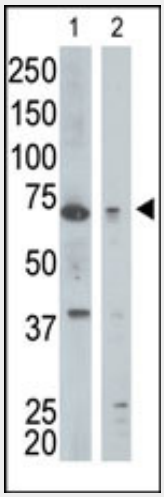
GGA1 Antibody (N-term) - Images



A, N2a cells cotransfected with APP770 □V5 and GGA1 □myc or empty vector were immunostained for APP (Alexa488; green), GGA1 (Cy5; blue), and the Golgi marker GM130 (Cy3; red). B, The same transfection was stained for the endosomal marker EEA1 (Cy3). C, To assess cell-surface localization, APP695 □GFP and GGA1 □myc or empty vector were cotransfected and then immunostained with an Ab to the APP ectodomain on ice without permeabilization (Cy3). Cells were then fixed, permeabilized, and stained for GGA1 (Cy5). (J. Neurosci. 2006 Sep

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27;26(39):9913-9922)



The anti-GGA1 Pab (Cat. #AP2316a) is used in Western blot to detect GGA1 in mouse kidney tissue lysate (lane 1) and Jurkat cell lysate (lane 2).

GGA1 Antibody (N-term) - Background

GGA1 is a member of the Golgi-localized, gamma adaptin ear-containing, ARF-binding (GGA) protein family. Members of this family are ubiquitous coat proteins that regulate the trafficking of proteins between the trans-Golgi network and the lysosome. These proteins share an amino-terminal VHS domain which mediates sorting of the mannose 6-phosphate receptors at the trans-Golgi network. They also contain a carboxy-terminal region with homology to the ear domain of gamma-adaptins.

GGA1 Antibody (N-term) - References

Zhai, P., et al., Biochemistry 42(47):13901-13908 (2003).
Zhu, G., et al., Biochemistry 42(21):6392-6399 (2003).
Shiba, T., et al., Nat. Struct. Biol. 10(5):386-393 (2003).
Suer, S., et al., Proc. Natl. Acad. Sci. U.S.A. 100(8):4451-4456 (2003).
Shiba, T., et al., Nature 415(6874):937-941 (2002).

GGA1 Antibody (N-term) - Citations

- GGA1 acts as a spatial switch altering amyloid precursor protein trafficking and processing.