

GGA3 Antibody (N-term) Blocking Peptide
Synthetic peptide
Catalog # BP2318a**Specification**

GGA3 Antibody (N-term) Blocking Peptide - Product InformationPrimary Accession [Q9NZ52](#)**GGA3 Antibody (N-term) Blocking Peptide - Additional Information****Gene ID** 23163**Other Names**

ADP-ribosylation factor-binding protein GGA3, Golgi-localized, gamma ear-containing, ARF-binding protein 3, GGA3, KIAA0154

Target/Specificity

The synthetic peptide sequence used to generate the antibody [AP2318a](/product/products/AP2318a) was selected from the N-term region of human GGA3. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

GGA3 Antibody (N-term) Blocking Peptide - Protein Information**Name** GGA3 {ECO:0000312|MIM:606006}**Synonyms** KIAA0154**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](http://www.uniprot.org/citations/11301005)). Mediates export of the GPCR receptor ADRA2B to the cell surface (PubMed: [26811329](http://www.uniprot.org/citations/26811329)). Involved in BACE1 transport and sorting as well as regulation of BACE1 protein levels (PubMed: [15615712](http://www.uniprot.org/citations/15615712), PubMed: [17553422](http://www.uniprot.org/citations/17553422)

target="_blank">17553422, PubMed:20484053). Regulates retrograde transport of BACE1 from endosomes to the trans-Golgi network via interaction through the VHS motif and dependent of BACE1 phosphorylation (PubMed:15615712). Modulates BACE1 protein levels independently of the interaction between VHS domain and DXXLL motif through recognition of ubiquitination (PubMed:20484053). Key player in a novel DXXLL-mediated endosomal sorting machinery to the recycling pathway that targets NTRK1 to the plasma membrane (By similarity).

Cellular Location

Golgi apparatus, trans-Golgi network membrane; Peripheral membrane protein. Endosome membrane; Peripheral membrane protein. Early endosome membrane; Peripheral membrane protein. Recycling endosome membrane {ECO:0000250|UniProtKB:A0A0G2JV04}; Peripheral membrane protein

Tissue Location

Ubiquitously expressed.

GGA3 Antibody (N-term) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)

GGA3 Antibody (N-term) Blocking Peptide - Images

GGA3 Antibody (N-term) Blocking Peptide - Background

GGA3 is a member of the Golgi-localized, gamma adaptin ear-containing, ARF-binding (GGA) family. This family includes ubiquitous coat proteins that regulate the trafficking of proteins between the trans-Golgi network and the lysosome. GGA3 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. 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.

GGA3 Antibody (N-term) Blocking Peptide - References

Prag, G., et al., Proc. Natl. Acad. Sci. U.S.A. 102(7):2334-2339 (2005). Bilodeau, P.S., et al., J. Biol. Chem. 279(52):54808-54816 (2004). Puertollano, R., et al., Nat. Cell Biol. 6(3):244-251 (2004). Wakasugi, M., et al., Biochem. Biophys. Res. Commun. 306(3):687-692 (2003). Misra, S., et al., Nature 415(6874):933-937 (2002).