

Rabbit Anti-GGA3 antibody

SL13345R

Product Name:	GGA3
Chinese Name:	γ-衔接蛋白相关蛋白3抗体
Alias:	ADP ribosylation factor binding protein 3; ADP ribosylation factor binding protein GGA 3; ADP ribosylation factor binding protein GGA3; ADP-ribosylation factor- binding protein GGA3; ARF binding protein GGA 3; ARF binding protein GGA3; ARF-binding protein 3; gamma ear-containing; GGA 3; GGA3; GGA3_HUMAN; Golgi associated gamma adaptin ear containing ARF binding protein 3; Golgi-localized; KIAA0154.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat, Pig, Cow, Horse, Rabbit, Sheep,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100- 500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	78kDa
Cellular localization:	cytoplasmicThe cell membrane
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human GGA3:51-150/723
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	The GGA family of proteins (Golgi-localized, g-Adaptin ear-containing, ARF-binding proteins) are ubiquitous coat proteins that facilitate the trafficking of soluble proteins

from the trans-Golgi network (TGN) to endosomes/lysosomes by means of interactions with TGN-sorting receptors, ARF (ADP-ribosylation factor), and clathrin. Members of the GGA family, GGA1,GGA2 (also known as VEAR) and GGA3, are multi-domain proteins that bind mannose 6-phosphate receptors (MPRs). GGAs have modular structures with an N-terminal VHS (VPS27, Hrs and STAM) domain followed by a GAT (GGA and Tom1) domain, a connecting hinge segment and a C-terminal GAE (g-Adaptin ear) domain. The amino-terminal VHS domains of GGAs form complexes with the cytoplasmic domains of sorting receptors by recognizing acidic-cluster di-leucine (ACLL) sequences. The human GGA3 gene maps to chromosome 17 and encodes a 723 amino acid protein that shares 46% sequence identity with GGA1 and 38% with GGA2.

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.

Subunit:

Monomer. Interacts with SORT1, SORL1, LRP3, GGA binding partner (GGABP) and P200 (By similarity). Interacts with GGA1 and GGA2. Binds to clathrin and activated ARFs. Binds RABEP1 and RABGEF1. Interacts with the membrane proteins M6PR/CD-MPR, IGF2R/CI-MPR and BACE1 and the accessory proteins SYNRG, EPN4, NECAP1, NECAP2 and AFTPH/aftiphilin. Interacts with TSG101 and UBC.

Subcellular Location:

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

Tissue Specificity: Ubiquitously expressed.

Post-translational modifications:

Phosphorylated by CK2 and dephosphorylated by PP2A (By similarity). Phosphorylation of GGA3 allows the internal AC-LL motif to bind the VHS domain and to inhibit the recognition of cargo signals. Ubiquitinated.

Similarity: Belongs to the GGA protein family. Contains 1 GAE domain. Contains 1 GAT domain. Contains 1 VHS domain.

SWISS: Q9NZ52

Gene ID:

23163

Database links:

Entrez Gene: 23163Human

Entrez Gene: 260302Mouse

Entrez Gene: 360658Rat

Omim: 606006Human

SwissProt: Q9NZ52Human

SwissProt: Q8BMI3Mouse

Unigene: 87726Human

Unigene: 119479Mouse

Unigene: 198912Rat

MMM.SUR

stech.com **Important Note:** This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.