

GNA12 Antibody (S67)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP8035a**Specification**

GNA12 Antibody (S67) - Product Information

Application	WB,E
Primary Accession	Q03113
Other Accession	P25157 , Q6Q7Y5 , P27601 , Q14344 , Q63210 , P27600 , Q5YKG4
Reactivity	Human
Predicted	Zebrafish, Mouse, Rat, Drosophila
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	44279
Antigen Region	46-75

GNA12 Antibody (S67) - Additional Information**Gene ID** 2768**Other Names**

Guanine nucleotide-binding protein subunit alpha-12, G alpha-12, G-protein subunit alpha-12, GNA12

Target/Specificity

This GNA12 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 46-75 amino acids from human GNA12.

Dilution

WB~~1:1000

E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

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

GNA12 Antibody (S67) is for research use only and not for use in diagnostic or therapeutic procedures.

GNA12 Antibody (S67) - Protein Information

Name GNA12

Function Guanine nucleotide-binding proteins (G proteins) are involved as modulators or transducers in various transmembrane signaling systems (PubMed:[12515866](#), PubMed:[15240885](#), PubMed:[15525651](#), PubMed:[16705036](#), PubMed:[16787920](#), PubMed:[17565996](#), PubMed:[22609986](#), PubMed:[23762476](#), PubMed:[27084452](#)). Activates effector molecule RhoA by binding and activating RhoGEFs (ARHGEF12/LARG) (PubMed:[12515866](#), PubMed:[15240885](#), PubMed:[16202387](#)). GNA12-dependent Rho signaling subsequently regulates transcription factor AP-1 (activating protein-1) (By similarity). GNA12-dependent Rho signaling also regulates protein phosphatase 2A activation causing dephosphorylation of its target proteins (PubMed:[15525651](#), PubMed:[17565996](#)). Promotes tumor cell invasion and metastasis by activating RhoA/ROCK signaling pathway and up-regulating pro-inflammatory cytokine production (PubMed:[16705036](#), PubMed:[16787920](#), PubMed:[23762476](#), PubMed:[27084452](#)). Inhibits CDH1-mediated cell adhesion in process independent from Rho activation (PubMed:[11976333](#), PubMed:[16787920](#)). Together with NAPA promotes CDH5 localization to plasma membrane (PubMed:[15980433](#)). May play a role in the control of cell migration through the TOR signaling cascade (PubMed:[22609986](#)).

Cellular Location

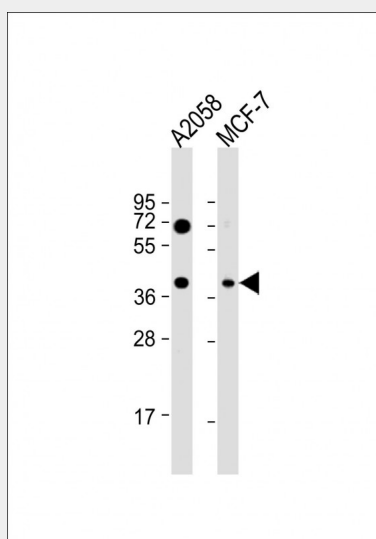
Cell membrane; Lipid-anchor {ECO:0000250|UniProtKB:Q63210}. Lateral cell membrane; Lipid-anchor {ECO:0000250|UniProtKB:Q63210}. Cytoplasm. Note=CDH1 enhances cell membrane localization.

GNA12 Antibody (S67) - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

GNA12 Antibody (S67) - Images



All lanes : Anti-GNA12 Antibody (S67) at 1:1000 dilution Lane 1: A2058 whole cell lysate Lane 2: MCF-7 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 44 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

GNA12 Antibody (S67) - Background

Guanine nucleotide-binding proteins (G proteins) are modulators or transducers in various transmembrane signaling systems. G proteins are composed of 3 subunits; alpha, beta and gamma. The alpha chain contains the guanine nucleotide binding site.

GNA12 Antibody (S67) - References

Krakstad, B.F., et al., Proc. Natl. Acad. Sci. U.S.A. 101(28):10314-10319 (2004).
Hillier, L.W., et al., Nature 424(6945):157-164 (2003).
Scherer, S.W., et al., Science 300(5620):767-772 (2003).
Suzuki, N., et al., Proc. Natl. Acad. Sci. U.S.A. 100(2):733-738 (2003).
Yamaguchi, Y., et al., J. Biol. Chem. 278(17):14936-14939 (2003).