

Datasheet for ABIN7548077  
**GNA12 Protein (AA 1-381) (His tag)**



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## Overview

Quantity:	1 mg
Target:	GNA12
Protein Characteristics:	AA 1-381
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This GNA12 protein is labelled with His tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS)

## Product Details

Purpose:	Custom-made recombinat GNA12 Protein expressed in mammalien cells.
Sequence:	<p>MSGVVRTLSR CLLPAEAGGA RERRAGSGAR DAEREARRRS RDIDALLARE RRAVRRLVKI            LLLGAGESGK STFLKQMR II HGREFDQKAL LEFRDTIFDN ILKGSRLVD ARDKLGIPWQ            YSENEKHGMF LMAFENKAGL PVEPATFQLY VPALSALWRD SGIREAFSRR SEFQLGESVK            YFLDNLDRIG QLNYPFSKQD ILLARKATKG IVEHDFVIKK IPFKMVDVGG QRSQRQKWFQ            CFDGITSILF MVSSSEYDQV LMEDRRTNRL VESMNIFETI VNNKLFFNVS IILFLNKMDL            LVEKVKTVSI KKHFPDFRGD PHRLQVQRY LVQCFDRKRR NRSKPLFHHF TTAIDTENVR            FVFHAVKDTI LQENLKDIML Q <b>Sequence without tag. The proposed Purification-Tag is based on experiences with the expression system, a different complexity of the protein could make another tag necessary. In case you have a special request, please contact us.</b></p>
Characteristics:	Key Benefits:

## Product Details

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- Made to order protein - from design to production - by highly experienced protein experts.
- Protein expressed in mammalian cells and purified in one-step affinity chromatography
- The optimized expression system ensures reliability for intracellular, secreted and transmembrane proteins.
- State-of-the-art algorithm used for plasmid design (Gene synthesis).

This protein is a made-to-order protein and will be made for the first time for your order. Our experts in the lab try to ensure that you receive soluble protein.

If you are not interested in a full length protein, please contact us for individual protein fragments.

The big advantage of ordering our made-to-order proteins in comparison to ordering custom made proteins from other companies is that there is no financial obligation in case the protein cannot be expressed or purified.

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Purity:	> 90 % as determined by Bis-Tris Page, Western Blot
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Grade:	custom-made
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## Target Details

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Target:	GNA12
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Alternative Name:	GNA12 ( <a href="#">GNA12 Products</a> )
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Background:	Guanine nucleotide-binding protein subunit alpha-12 (G alpha-12) (G-protein subunit alpha-12),FUNCTION: Guanine nucleotide-binding proteins (G proteins) are involved as modulators or transducers in various transmembrane signaling systems (PubMed:22609986, PubMed:15525651, PubMed:15240885, PubMed:17565996, PubMed:12515866, PubMed:16787920, PubMed:16705036, PubMed:23762476, PubMed:27084452). Activates effector molecule RhoA by binding and activating RhoGEFs (ARHGEF12/LARG) (PubMed:15240885, PubMed:12515866, 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:23762476, PubMed:16787920, PubMed:16705036, PubMed:27084452). Inhibits CDH1-mediated cell adhesion in process independent from Rho activation (PubMed:11976333, PubMed:16787920). Together with NAPA
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## Target Details

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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).

{ECO:0000250|UniProtKB:P27600, ECO:0000269|PubMed:11976333, ECO:0000269|PubMed:12515866, ECO:0000269|PubMed:15240885, ECO:0000269|PubMed:15525651, ECO:0000269|PubMed:15980433, ECO:0000269|PubMed:16705036, ECO:0000269|PubMed:16787920, ECO:0000269|PubMed:17565996, ECO:0000269|PubMed:22609986, ECO:0000269|PubMed:23762476, ECO:0000269|PubMed:27084452}.

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Molecular Weight: 44.3 kDa

UniProt: [Q03113](#)

## Application Details

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Application Notes: In addition to the applications listed above we expect the protein to work for functional studies as well. As the protein has not been tested for functional studies yet we cannot offer a guarantee though.

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Restrictions: For Research Use only

## Handling

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Format: Liquid

Buffer: The buffer composition is at the discretion of the manufacturer.

Handling Advice: Avoid repeated freeze-thaw cycles.

Storage: -80 °C

Storage Comment: Store at -80°C.

Expiry Date: 12 months