

Datasheet for ABIN3080440

GNB5 Protein (AA 1-395) (Strep Tag)



[Go to Product page](#)

Overview

Quantity:	1 mg
Target:	GNB5
Protein Characteristics:	AA 1-395
Origin:	Human
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This GNB5 protein is labelled with Strep Tag.
Application:	ELISA, Western Blotting (WB), SDS-PAGE (SDS)

Product Details

Brand:	AlIcE®
Sequence:	<p>MCDQTFVLNV FGSCDKCFKQ RALRPVFKS QQLSYCSTCA EIMATEGLHE NETLASLKSE AESLKGKLEE ERAKLHDVEL HQVAERVEAL GQFVMKTRRT LKGHGKVLK MDWCKDKRRI VSSSQDGKVI VWDSFTTNKE HAVTMPCTWV MACAYAPSGC AIACGGLDNK CSVYPLTFDK NENMAAKKKS VAMHTNYLSA CSFTNSDMQI LTASGDGTCA LWDVESGQLL QSFHGHGADV LCLDLAPSET GNTFVSGGCD KKAMVWDMRS GQCVQAFETH ESDINSVRY Y PSGDAFASGS DDATCRLYDL RADREVAIYS KESIIFGASS VDFSLSGRLL FAGYNDYTIN VWDVLKGSRV SILFGHENRV STLRVSPDGT AFCSGSWDHT LRVWA</p> <p>Sequence without tag. The proposed Strep-Tag is based on experience s 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.</p>
Characteristics:	Key Benefits:

Product Details

- Made in Germany - from design to production - by highly experienced protein experts.
- Protein expressed with ALiCE® and purified in one-step affinity chromatography
- These proteins are normally active (enzymatically functional) as our customers have reported (not tested by us and not guaranteed).
- 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.

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.

Expression System:

- ALiCE®, our Almost Living Cell-Free Expression System is based on a lysate obtained from *Nicotiana tabacum* c.v.. This contains all the protein expression machinery needed to produce even the most difficult-to-express proteins, including those that require post-translational modifications.
- During lysate production, the cell wall and other cellular components that are not required for protein production are removed, leaving only the protein production machinery and the mitochondria to drive the reaction. During our lysate completion steps, the additional components needed for protein production (amino acids, cofactors, etc.) are added to produce something that functions like a cell, but without the constraints of a living system - all that's needed is the DNA that codes for the desired protein!

Concentration:

- The concentration of our recombinant proteins is measured using the absorbance at 280nm.
- The protein's absorbance will be measured against its specific reference buffer.
- We use the Expasy's ProtParam tool to determine the absorption coefficient of each protein.

Purification:	One-step Strep-tag purification of proteins expressed in Almost Living Cell-Free Expression System (ALiCE®).
Purity:	> 70-80 % as determined by SDS PAGE, Western Blot and analytical SEC (HPLC).
Grade:	custom-made

Target Details

Target:	GNB5
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Target Details

Alternative Name:	GNB5 (GNB5 Products)
Background:	<p>Guanine nucleotide-binding protein subunit beta-5 (Gbeta5) (Transducin beta chain 5),FUNCTION: Enhances GTPase-activating protein (GAP) activity of regulator of G protein signaling (RGS) proteins, such as RGS7 and RGS9, hence involved in the termination of the signaling initiated by the G protein coupled receptors (GPCRs) by accelerating the GTP hydrolysis on the G-alpha subunits, thereby promoting their inactivation (PubMed:27677260). Increases RGS7 GTPase-activating protein (GAP) activity, thereby regulating mood and cognition (By similarity). Increases RGS9 GTPase-activating protein (GAP) activity, hence contributes to the deactivation of G protein signaling initiated by D(2) dopamine receptors (PubMed:27677260). May play an important role in neuronal signaling, including in the parasympathetic, but not sympathetic, control of heart rate (By similarity).</p> <p>{ECO:0000250 UniProtKB:A1L271, ECO:0000250 UniProtKB:P62881, ECO:0000269 PubMed:27677260}.</p>
Molecular Weight:	43.6 kDa
UniProt:	O14775
Pathways:	Myometrial Relaxation and Contraction , Regulation of G-Protein Coupled Receptor Protein Signaling , Thromboxane A2 Receptor Signaling

Application Details

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.
Comment:	<p>ALiCE®, our Almost Living Cell-Free Expression System is based on a lysate obtained from <i>Nicotiana tabacum</i> c.v.. This contains all the protein expression machinery needed to produce even the most difficult-to-express proteins, including those that require post-translational modifications.</p> <p>During lysate production, the cell wall and other cellular components that are not required for protein production are removed, leaving only the protein production machinery and the mitochondria to drive the reaction. During our lysate completion steps, the additional components needed for protein production (amino acids, cofactors, etc.) are added to produce something that functions like a cell, but without the constraints of a living system - all that's needed is the DNA that codes for the desired protein!</p>
Restrictions:	For Research Use only

Handling

Format:	Liquid
Buffer:	The buffer composition is at the discretion of the manufacturer. Standard Storage Buffer: PBS pH 7.4, 10 % Glycerol Might differ depending on protein.
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	12 months