Datasheet for ABIN3115440

GPRC6A Protein (AA 19-926) (rho-1D4 tag)

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Overview

Quantity:	1 mg
Target:	GPRC6A
Protein Characteristics:	AA 19-926
Origin:	Human
Source:	Insect Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This GPRC6A protein is labelled with rho-1D4 tag.
Application:	Crystallization (Crys), ELISA, SDS-PAGE (SDS), Western Blotting (WB)

Product Details

Sequence:	QPCQTPDDFV AATSPGHIII GGLFAIHEKM LSSEDSPRRP QIQECVGFEI SVFLQTLAMI HSIEMINNST LLPGVKLGYE IYDTCTEVTV AMAATLRFLS KFNCSRETVE FKCDYSSYMP RVKAVIGSGY SEITMAVSRM LNLQLMPQVG YESTAEILSD KIRFPSFLRT VPSDFHQIKA MAHLIQKSGW NWIGIITTDD DYGRLALNTF IIQAEANNVC IAFKEVLPAF LSDNTIEVRI NRTLKKIILE AQVNVIVVFL RQFHVFDLFN KAIEMNINKM WIASDNWSTA TKITTIPNVK KIGKVVGFAF RRGNISSFHS FLQNLHLLPS DSHKLLHEYA MHLSACAYVK DTDLSQCIFN HSQRTLAYKA NKAIERNFVM RNDFLWDYAE PGLIHSIQLA VFALGYAIRD LCQARDCQNP NAFQPWELLG VLKNVTFTDG WNSFHFDAHG DLNTGYDVVL WKEINGHMTV TKMAEYDLQN DVFIIPDQET KNEFRNLKQI QSKCSKECSP GQMKKTTRSQ HICCYECQNC PENHYTNQTD MPHCLLCNNK THWAPVRSTM CFEKEVEYLN WNDSLAILLL ILSLLGIIFV LVVGIIFTRN LNTPVVKSSG GLRVCYVILL CHFLNFASTS FFIGEPQDFT CKTRQTMFGV SFTLCISCIL TKSLKILLAF SFDPKLQKFL KCLYRPILII FTCTGIQVVI CTLWLIFAAP TVEVNVSLPR VIILECEEGS

	ILAFGTMLGY IAILAFICFI FAFKGKYENY NEAKFITFGM LIYFIAWITF IPIYATTFGK YVPAVEIIVI LISNYGILYC TFIPKCYVII CKQEINTKSA FLKMIYSYSS HSVSSIALSP ASLDSMSGNV TMTNPSSSGK SATWQKSKDL QAQAFAHICR ENATSVSKTL PRKRMSSI **Sequence without tag. Tag location is at the discretion of the manufacturer. If you have a special request, please contact us.**
Characteristics:	• Made in Germany - from design to production - by highly experienced protein experts. • Human GPRC6A Protein (raised in Insect Cells) purified by multi-step, protein-specific process to ensure crystallization grade. • 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 will ensure that you receive a correctly folded 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. In the unlikely event that the protein cannot be expressed or purified we do not charge anything (other companies might charge you for any performed steps in the expression process for custom-made proteins, e.g. fees might apply for the expression plasmid, the first expression experiments or purification optimization). When you order this made-to-order protein you will only pay upon receival of the correctly folded protein. With no financial risk on your end you can rest assured that our experienced protein experts will do everything to make sure that you receive the protein you ordered. The concentration of our recombinant proteins is measured using the absorbance at 280nm. The protein's absorbance will be measured in several dilutions and is measured against its specific reference buffer. The concentration of the protein is calculated using its specific absorption coefficient. We use the Expasy's protparam tool to determine the absorption coefficient of each protein.
Purification:	Three step purification of membrane proteins expressed in baculovirus infected SF9 insect cells: 1. Membrane proteins are fractioned by ultracentrifugation and subsequently solubilized with different detergents (detergent screen). Samples are analyzed by Western blot. 2. The best performing detergent is used for solubilization and the proteins are purified via their rho1D4 tag via two rho1D4 antibody columns: one DTT resistant, the other one not. Eluate fractions are analyzed by Western blot. 3. Protein containing fractions of the best purification are subjected to second purification step through size exclusion chromatograph. Eluate fractions are analyzed by SDS-PAGE and Western blot.

Product Details

Purity:	>95 % as determined by SDS PAGE, Size Exclusion Chromatography and Western Blot.
Sterility:	0.22 µm filtered
Endotoxin Level:	Protein is endotoxin-free.
Grade:	Crystallography grade

Target Details

Target:	GPRC6A
Alternative Name:	GPRC6A (GPRC6A Products)
Background:	Receptor activated by amino acids with a preference for basic amino acids such as L-Lys, L-Arg and L-ornithine but also by small and polar amino acids. The L-alpha amino acids respond is augmented by divalent cations Ca(2+) and Mg(2+). Activated by extracellular calcium and osteocalin. Seems to act through a G(q)/G(11) and G(i)-coupled pathway. Mediates the non-genomic effects of androgens in multiple tissue. May coordinates nutritional and hormonal anabolic signals through the sensing of extracellular amino acids, osteocalcin, divalents ions and its responsiveness to anabolic steroids. {ECO:0000269|PubMed:15576628, ECO:0000269|PubMed:20947496}.
Molecular Weight:	104.0 kDa Including tag.
UniProt:	Q5T6X5

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 gurantee though.
Comment:	In cases in which it is highly likely that the recombinant protein with the default tag will be insoluble our protein lab may suggest a higher molecular weight tag (e.g. GST-tag) instead to increase solubility. We will discuss all possible options with you in detail to assure that you receive your protein of interest.
Restrictions:	For Research Use only

Handling

Format:	Liquid

Handling

Buffer:	100 mM NaCL, 20 mM Hepes, 10% glycerol. pH value 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:	Unlimited (if stored properly)

