

Datasheet for ABIN3131188

SYNGAP1 Protein (AA 1-1340) (His tag)[Go to Product page](#)**1** Image

Overview

Quantity:	1 mg
Target:	SYNGAP1
Protein Characteristics:	AA 1-1340
Origin:	Mouse
Source:	Insect Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This SYNGAP1 protein is labelled with His tag.
Application:	ELISA, Western Blotting (WB), Crystallization (Crys), SDS-PAGE (SDS)

Product Details

Sequence:	MSRSRASIHR GSIPAMSYAP FRDVRGPPMH RTQYVHSPYD RPGWNPRFCI ISGNQLMLLD EDEIHPLLIR DRRSESSRNK LLRRTVSVPV EGRPHGEHEY HLGRSRRKSV PGGKQYSMEA APAAPFRPSQ GFLSRRLKSS IKRTKSQPKL DRTSSFRQIL PRFRSADHDR ARLMQSFKE HSHESSLSPS SAAEALELNL DEDSIIKPVH SSILGQEFCF EVTTSSGTKC FACRSAAERD KWENLQRAV KPNKDNSRRV DNVKLWIE ARELPPKKRY YCELCLDDML YARTTSKPRS ASGDTVFWGE HFEFNNLPAV RALRLHLYRD SDKKRKKDKA GYVGLVTPPV ATLAGRHFT QWYPVTLPTG SGGSGGMMSG GGGGSGGGSG GKGKGGCPAV RLKARYQTMS ILPMELYKEF AEYVTNHYRM LCAVLEPALN VKGKEEVASA LVHILQSTGK AKDFLSDMAM SEVDRFMERE HLIFRENTLA TKAIEEYMRL IGQKYLKDAI GEFIRALYES EENCEVDPIK CTASSLAEHQ ANLRMCCELA LCKVVNSHCV FPRELKEVFA SWRLRCAERG REDIA DRLIS ASLFLRFLCP AIMSPSLFGL MQEYPDEQTS RTLTIAKVI QNLANFSKFT SKEDFLGFMN EFLELEWGSM QQFLYEISNL DTLTNSSSFE GYIDLGRELS TLHALLWEVL PQLSKEALLK LGPLPRLLND
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ISTALRNPNI QRQPSRQSER TRSQPMVLRG PSAEMQGYMM RDLNSSIDLQ SFMARGLNSS
MDMARLPSPT KEKPPPPPPG GGKDLFYVSR PPLARSSPAY CTSSSDITEP EQKMLSVNKS
VSMLDLQGDG PGGRLNSSSV SNLAAVGDLL HSSQASLTAA LGLRPAPAGR LSQGSGSSIT
AAGMRLSQMG VTDDGVPAQQ LRIPLSFQNP LFHMAADGPG PPAGHGGSSG HGPPSSHHHH
HHHHHHRGGE PPGDTFAPFH GYSKSEDLS GVPKPPAASI LSHSYSDEF GPSGTDFTTR
QLSLQDSLQH MLSPQITIG PQRPA SPGP GSGGGSGGG QPPPLQRGKS QQLTVSAAQK
PRPSSGNLLQ SPEPSYGP PARPRQQLSKEG SIGSGSGSGG GGGGGLKPSI TKQHSQTPST
LNPTMPASER TVAWVSNMPH LSADIESAHI EREEYKLKEY SKSMDESRLD RVKEYEEIHH
SLKERLHMSN RKLEEYERRL LSQEEQTSKI LMQYQARLEQ SEKRLRQQQV EKDSQIKSII
GRLMLVEEEL RRDHPAMAEP LPEPKRLLD AQERQLPPLG PTNPRVTLP PWNGLAPPAP
PPPPRLQITE NGEFRNTADH

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.
- Mouse Syngap1 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 receipt 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:

Two step purification of proteins expressed in baculovirus infected SF9 insect cells:

Product Details

1. In a first purification step, the protein is purified from the cleared cell lysate using three different His-tag capture materials: high yield, EDTA resistant, or DTT resistant. Eluate fractions are analyzed by SDS-PAGE.
2. Protein containing fractions of the best purification are subjected to second purification step through size exclusion chromatography. Eluate fractions are analyzed by SDS-PAGE and Western blot.

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: SYNGAP1

Alternative Name: Syngap1 ([SYNGAP1 Products](#))

Background: Major constituent of the PSD essential for postsynaptic signaling. Inhibitory regulator of the Ras-cAMP pathway. Member of the NMDAR signaling complex in excitatory synapses, it may play a role in NMDAR-dependent control of AMPAR potentiation, AMPAR membrane trafficking and synaptic plasticity. Regulates AMPAR-mediated miniature excitatory postsynaptic currents. Exhibits dual GTPase-activating specificity for Ras and Rap. May be involved in certain forms of brain injury, leading to long-term learning and memory deficits (By similarity). {ECO:0000250}.

Molecular Weight: 149.2 kDa Including tag.

UniProt: [F6SEU4](#)

Pathways: [Regulation of long-term Neuronal Synaptic Plasticity](#)

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: Protein has not been tested for activity yet. 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.

Application Details

Restrictions: For Research Use only

Handling

Format:	Liquid
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)

Images



Image 1. „Crystallography Grade“ protein due to multi-step, protein-specific purification process