

Datasheet for ABIN3092942 HGS Protein (AA 1-777) (His tag)



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Overview

Quantity:	1 mg
Target:	HGS
Protein Characteristics:	AA 1-777
Origin:	Human
Source:	Insect Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This HGS protein is labelled with His tag.
Application:	ELISA, Western Blotting (WB), SDS-PAGE (SDS), Crystallization (Crys)

Product Details

Sequence:	<p>MGRGSGTFER LLDKATSQLL LETDWESILQ ICDLIRQGDT QAKYAVNSIK KKVNDKNPHV</p> <p>ALYALEVMES VVKNCGQTVH DEVANKQTME ELKDLLKRQV EVNVRNKILY LIQAWAHAFR</p> <p>NEPKYKVVQD TYQIMKVEGH VFPEFKESDA MFAAERAPDW VDAEECHRCR VQFGVMTRKH</p> <p>HCRACGQIFC GKCSSKYSTI PKFGIEKEVR VCEPCYEQLN RKAEGKATST TELPPEYLTS</p> <p>PLSQQSQLPP KRDETALQEE EELQLALALS QSEAEKERL RQKSTYTSYP KAEPMPASS</p> <p>APPASSLYSS PVNSSAPLAE DIDPELARYL NRNYWEKKQE EARKSPTPSA PVPLTEPAAQ</p> <p>PGEHGAAPT N VVENPLPETD SQPIPPSGGP FSEPQFHNGE SEESHEQFLK ALQNAVTTFV</p> <p>NRMKSNHMRG RSITNDSAVL SLFQSINGMH PQLLELLNQL DERRLYEGL QDKLAQIRDA</p> <p>RGALSALREE HREKLRRAAE EAERQRQIQL AQKLEIMRQK KQEYLEVQRQ LAIQRLEQEQ</p> <p>KERQMRLEQQ KQTVQMRAQM PAFPLPYAQL QAMPAAGGVL YQPSGPASFP STFSPAGSVE</p> <p>GSPMHGVYMS QPAPAAGPYP SMPSTAADPS MVSAYMYPAG ATGAQAAPQA QAGPTASPAY</p> <p>SSYQPTPTAG YQNVASQAPQ SLPAISQPPQ SSTMGYMGSQ SVSMGYQPYN MQNLMTTLPS</p>
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QDASLPPQQP YIAGQQPMYQ QMAPSGGPPQ QQPPVAQQPQ AQGPPAQGSE AQLISFD

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 HGS 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:

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.

Product Details

Grade: Crystallography grade

Target Details

Target: HGS

Alternative Name: HGS ([HGS Products](#))

Background: Involved in intracellular signal transduction mediated by cytokines and growth factors. When associated with STAM, it suppresses DNA signaling upon stimulation by IL-2 and GM-CSF. Could be a direct effector of PI3-kinase in vesicular pathway via early endosomes and may regulate trafficking to early and late endosomes by recruiting clathrin. May concentrate ubiquitinated receptors within clathrin-coated regions. Involved in down-regulation of receptor tyrosine kinase via multivesicular body (MVBs) when complexed with STAM (ESCRT-0 complex). The ESCRT-0 complex binds ubiquitin and acts as sorting machinery that recognizes ubiquitinated receptors and transfers them to further sequential lysosomal sorting/trafficking processes. May contribute to the efficient recruitment of SMADs to the activin receptor complex. Involved in receptor recycling via its association with the CART complex, a multiprotein complex required for efficient transferrin receptor recycling but not for EGFR degradation.

Molecular Weight: 87.1 kDa Including tag.

UniProt: [O14964](#)

Pathways: [EGFR Signaling Pathway](#), [CXCR4-mediated Signaling Events](#), [Synaptic Vesicle Exocytosis](#), [EGFR Downregulation](#)

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: 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
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