

Recombinant Human HGS Protein

For Research Use Only

1. Basic Product Information

Catalog No.: REP50404

Size: 10ug, 100ug

Protein Name: Hepatocyte growth factor-regulated tyrosine kinase substrate (Hrs) (Protein pp110)

Synonym: HGS, HRS

UniProt ID: O14964

UniProt Link: www.uniprot.org/uniprotkb/O14964/entry

Species Source: Human

Expression System: HEK293T eukaryotic cell expression system Sequence

Length: 777 AA

Molecular Weight: 86 KD

Protein Tag: C-terminal His6

2. Amino Acid Sequence

MGRGSGTTERLLDKATSQLLLLETDWESILQICDLIRQGDTQAKYAVNSIKKKVNDKNPHVALYALEVM
ESVVKNCGQTVHDEVANKQTMEELKDLLKRQVEVNVRNKILYLIQAWAHAFRNEPKYKVVDQTYQI
MKVEGHVFPEFKESDAMFAAERAPDWVDAEECHRCRVQFGVMTRKHHCACGQIFCGKCSSKYS
TIPKFGIEKEVRVCEPCYEQLNRKAEGKATSTTELPPEYLTSPLSQQSQLPPKRDETALQEEEEELQLA
LALSQSEAEKERLRQKSTYTSYPKAEPMPSSASSAPPASSLYSSPVNSSAPLAEDIDPELARYLNRN
YWEKKQEEARKSPTPSAPVPLTEPAAQPGEGHAAPTNNVENPLPETDSQPIPPSGGPFSEPFHNG
ESESHEQFLKALQNAVTTFFVNRMKSNHMRGRSITNDSAVLSLFQSINGMHPQLLELLNQLDERRLY
YEGLDKLAQIRDARGALSALREEHREKLRRAAEEAERQRQIQLAQKLEIMRQKKQEYLEVQRQLAI
QRLQEKEKERQMRLEQQKQTVQMQRAQMPAFPLPYAQLQAMPAAGGVLYQPSGPASFPSTFSPAG
SVEGSPMHGVYMSQPAPAAGPYPSMPSTAADPSMVSAYMYPAGATGAQAAPQAQAGPTASPAY
SYQPTPTAGYQNVASQAPQSLPAISQPPQSSTMGYMGSSVSMGYQPYNMQNLMTTLPSQDASL
PPQQPYIAGQQPMYQQMAPSGGPPQQQPPVAQQPQAQGPAAQGSEAQLISFD

3. Buffer Composition

Liquid format: PBS-based buffer containing 50% glycerol. Glycerol concentration can be customized upon customer request; please state special requirements when placing your order.

Lyophilized format: Buffer before lyophilization is PBS supplemented with 6% trehalose.

4. Storage Conditions

Upon receipt, store the product at -20 °C or -80 °C. Aliquot the product for on-demand use to preserve protein activity and prevent denaturation and inactivation caused by repeated freeze-thaw cycles.

5. Product Description

This product is recombinant Hepatocyte growth factor-regulated tyrosine kinase substrate (Hrs) (Protein pp110) produced using the HEK293T eukaryotic cell expression system. It is suitable for in-vitro functional assays, protein-protein interaction studies, antibody preparation and other biomedical research applications.

Protein Function: 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 a 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.

Subcellular Localization: Cytoplasm . Early endosome membrane ; Peripheral membrane protein ; Cytoplasmic side . Endosome, multivesicular body membrane ; Peripheral membrane protein .
Note=Colocalizes with UBQLN1 in ubiquitin-rich cytoplasmic aggregates that are not endocytic compartments.

6. Notes

- Avoid repeated freeze-thaw cycles to maintain protein stability and biological activity.
- Please specify special buffer-composition requirements at the time of order placement.
- For research use only. Not intended for clinical diagnosis, therapeutic use or commercial manufacturing.