

Herstatin Human E. coli Tag free

Product Data Sheet

Type: Recombinant

Source: E. coli

Species: Human

Other names: V-erb-b2 erythroblastic leukemia viral oncogene homolog 2, neuro/glioblastoma derived oncogene homolog, HER-2, ERBB2, hCG_28177

Cat. No.:

RD172039100 (0.1 mg)

Description

Total 398 AA. MW: 43.4 kDa (calculated). 397 AA of recombinant Human Herstatin and one extra AA, N-terminal methionin (highlighted).

Introduction to the Molecule

HER-2/neu (erbB-2) encodes an 185-kDa orphan receptor tyrosine kinase that is constitutively active as a dimer. It displays potent oncogenic activity when overexpressed. Herstatin is the product of the alternative HER-2 transcript and it retains intron 8.

The herstatin mRNA can be found in the human kidney and liver, but its level is lower compared to that of p185HER-2 mRNA in carcinoma cells, which contains an amplified HER-2 gene. Herstatin appears to be an inhibitor of p185HER-2, because it disrupts dimers, reduces tyrosine phosphorylation of p185, and inhibits the anchorage-independent growth of transformed cells that overexpress HER-2.

Research topic

Oncology

Amino Acid Sequence

MTQVCTGTDM KLRLPASPET HLDMLRHLYQ GCQVVQGNLE LTYLPTNASL SFLQDIQEVQ GYVLIAHNQV RQVPLQRLRI
VRGTQLFEDN YALAVLDNGD PLNNTTPVTG ASPGGLRELQ LRSLTEILKG GVLIQRNPQL CYQDTILWKD IFHKNNQLAL
TLIDTNRSRA CHPCSPMCKG SRCWGESSED CQSLTRTVCA GGCARCKGPL PTDCCHEQCA AGCTGPKHSD CLACLFHNHS
GICELHCPAL VTYNTDTFES MPNPEGRTYF GASCVTACPY NYLSTDVGSC TLVCPLHNQE VTAEDGTQRC EKCSKPCARG
THSLPPRPAA VPVPLRMQPG PAHPVLSFLR PSWDLVSAFY SLPLAPLSPT SVPISEPVSVG RGPDPDAHVA VDLSRYEG

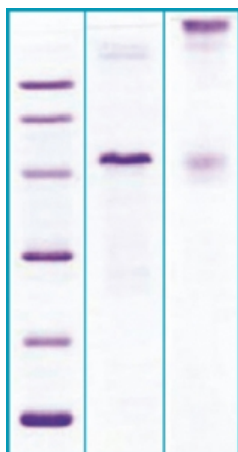
Source

E. coli

Purity

>95%

SDS-PAGE gel



12% SDS-PAGE separation of Human Herstatin

1. M.W. marker - 14, 21, 31, 45, 66, 97 kDa

2. reduced and heated sample, 5µg/lane

3. non-reduced and non-heated sample, 5µg/lane

Endotoxin

< 1.0 EU/ug

Formulation

Filtered (0.4 µm) and lyophilized in 0.5 mg/mL in 0.05 M Acetate buffer pH=4.0, 1 mM DTT

Reconstitution

Add 0.1M Acetate buffer pH4 to prepare a working stock solution of approximately 0.5 mg/mL and let the lyophilized pellet dissolve completely. Under conditions of ambient temperature the full reconstitution can take up to 30 minutes. For conversion into higher pH value, we recommend intensive dilution by relevant buffer to a concentration of 10µg/ml. In higher concentrations the solubility of this antigen is limited. Product is not sterile! Please filter the product by an appropriate sterile filter before using it in the cell culture. Add DTT (5 mM) and NaCl (0.1-0.15 M) before freezing to prevent potential aggregation.

Shipping

At ambient temperature. Upon receipt, store the product at the temperature recommended below.

Storage, Stability/Shelf Life

Store lyophilized protein at -20°C. Lyophilized protein remains stable until the expiry date when stored at -20°C. Aliquot reconstituted protein to avoid repeated freezing/thawing cycles and store at -80°C for long term storage. Reconstituted protein can be stored at 4°C for a limited period of time; it does not show any change after one week at 4°C.

Quality Control Test

BCA to determine quantity of the protein.

SDS PAGE to determine purity of the protein.

LAL to determine quantity of endotoxin.

Applications

ELISA, Western blotting

Note

This product is intended for research use only. The Certificate of Analysis is available on www.biovendor.com