Angiopoietin-like Protein-3, His Tag, human recombinant (rHuANGPTL-3-His)

Catalog No: 87333
Lot No: XXXXX
Source: *E. coli*
Synonyms: Angiopoietin 5, ANGPT5, ANGPTL3, Angiopoietin Like Protein 3

Background

ANGPTL3 and ANGPTL4 are angiopoietin-like proteins secreted and expressed mainly by the liver, their role being the regulation of triglyceride metabolism by inhibiting the lipolysis of triglyceride-rich lipoproteins. During different nutritional states (feeding/fasting) the levels of the circulating triglycerides are regulated by Angptl3 and Angptl4 through differential inhibition of Lipoprotein lipase (LPL) as shown by the experimental data. The molecular structure of ANGPTL3 is similar to that of the angiopoietins (vascular endothelial growth factors). Deletion mutants of human Angiopoietin 5 were used in order to demonstrate that the N-terminal domain (fragment 17-207) and not the C-terminal fibrinogen-like domain (fragment 207-460) increased the plasma triglyceride levels in mice.

Description

ANGPTL3 human recombinant, produced with N-terminal fusion of His Tag, containing 207 amino acid residues of ANGPTL3 human and 16 additional amino acid residues – His Tag, is a 26 kDa protein. The amino acid sequence of the ANGPTL3 human recombinant is 100% homologous to the 17-223 amino acid sequence of the human Angiopoietin-like proteins-3 precursor without signal sequence. ANGPTL3 is purified by one-step procedure using affinity Ni-NTA chromatography.

Physical Appearance

Lyophilized

Formulation

ANGPTL3 human sterile filtered and lyophilized from 0.5 mg/ml in 0.05 M acetate buffer pH 4.

Solubility

Add 0.2 ml of 0.1 M acetate buffer pH 4 and let the lyophilized pellet of ANGPTL3 human dissolve completely. For conversion into higher pH value, we recommend intensive dilution by relevant buffer to a concentration of 10 µg/ml. In higher concentrations the solubility of Angiopoietin 5 is limited.

Stability

Store lyophilized ANGPTL3 at -20°C. Aliquot the product after reconstitution to avoid repeated freezing/thawing cycles. Reconstituted Angiopoietin 5 can be stored at 4°C for a limited period of time; it does not show any change after two weeks at 4°C.

Purity

Greater than 95% as determined by SDS-PAGE.

Amino Acid Sequence

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MRGSHHHHHH GMASHMSRID QDNSSFDSLS PEPKSRFAML DDVKILANGL LQLGHGLKDF VHKTKGQIND IFQKLNIFDQ
SFYDLSLQTS EIKEEEKELR RTTYKLQVKN EEVKNMSLEL NSKLESLLEE KILLQQKVKY LEEQLTNLIQ NQPETPEHPE
VTSLKTFVEK QDNSIKDLLQ TVEDQYKQLN QQHSQIKEIE NQLRRTSIQE PTEISLSSKP RAP
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Applications
WB*ELISA

Usage
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