

32-20590: Recombinant Human ANGPTL-7(Discontinued)

Alternative Name : Angiopoietin-related protein 7, Angiopoietin-like protein 7, Cornea-derived transcript 6 protein, CDT6

Description

Source: Hi-5 Insect cells

Angiopoietin-like 7 (ANGPTL-7), or Cornea-Derived Transcript 6 (CDT6), is a member of the angiopoietin family of structurally related proteins, characterized by a coiled N-terminal domain and a C-terminal fibrinogen like domain. While ANGPTL-7 shares the structural features of the angiopoietin family, it plays a critical role in blocking the vascular endothelial Tie2 receptor to which other family members bind. Through the blocking of the Tie2 receptor, ANGPTL-7 does not act as a "true" angiopoietin, but rather as a morphogen that contributes to the avascularity and transparency of the cornea during both embryo and adult development. Human ANGPTL-7 is expressed at high levels in the avascular corneal stromal layer, a site of pathological angiogenesis normally devoid of blood vessels, suggesting that the protein acts as a negative regulator of angiogenesis in a manner similar to that of angiopoietin-1 and angiopoietin-2. In mouse xenograft models, ANGPTL-7 overexpression has been shown to lead to increased extracellular matrix components typical of a mature corneal stromal layer, as well as the reduction of tumor growth and aberrant blood vessel formation. Overexpression in human melanoma models shows a contradictory, up-regulation of endostatin, an endogenous angiostatic factor, in comparison to the down-regulation observed in mouse models. Recombinant Human ANGPTL-7 is a glycoprotein that migrates by SDS-PAGE analysis at an apparent molecular weight of 40- 50 kDa under reduced conditions, and contains 328 amino acid residues including a C-terminal His-tag. The calculated molecular weight of Recombinant Human ANGPTL-7 is 38.2 kDa.

Product Info

Amount : 5 µg / 20 µg

Purification : Purity: >= 98% by SDS-PAGE gel and HPLC analyses.

Content : This recombinant protein is supplied in lyophilized form.

Amino Acid : QKLSKHKTPA QPQLKAANCC EEVKELKAQV ANLSSLLSEL NKKQERDWVS VVMQVMELES
NSKRME SRLT DAESKYSEM NQIDIMQLQA AQTVTQTSAD AIYDCSSLYQ KNYRISGVYK LPPDDFLGSP
ELEVFCDMET SGGGWIIQR RKSGLVSFYR DWKQYKQGF G SIRGDFWLGN EHIHRLSRQP
TRLRVEMEDW EGNLRYAEYS HFVLGNELNS YRLFLGNYTG NVGNDALQYH NNTAFSTKDK
DNDNCLDKCA QLRKGGYWYN CCTDSNLNGV YYRLGEHNKH LDGITWYGW H GSTYSLKRVE
MKIRPEDFKP HHHHHHHH

Application Note

Measured by its binding ability to recombinant Alpha vBeta 3 integrin in a functional ELISA.