ANG-2, Human Recombinant

CATALOG #: 7116-10 10 µg
7116-50 50 µg

ALTERNATE NAMES: ANGPT-2

SOURCE: CHO cells

PURITY: ≥ 95% by SDS-PAGE gel and HPLC analyses

MOL. WEIGHT: 60-70 kDa

ENDOTOXIN LEVEL: < 0.1 ng/µg of protein (<1EU/µg).

FORM: Lyophilized

FORMULATION: Sterile filtered through a 0.2 micron filter. Lyophilized from 10 mM Sodium Phosphate, pH 8.0.

STORAGE CONDITIONS: Store at -20°C. After reconstitution, aliquot and store at -20°C to -80°C. Avoid repeated freezing and thawing cycles.

RECONSTITUTION:
Centrifuge the vial prior to opening. Reconstitute in water to a concentration of 0.1-1.0 mg/ml. Do not vortex. For extended storage, it is recommended to further dilute in a buffer containing a carrier protein (example 0.1% BSA) and store in working aliquots at -20°C to -80°C.

DESCRIPTION:
ANG-2 binds to the endothelial cell specific receptor Tie2, but, in contrast to ANG-1 does not induce tyrosine phosphorylation. Consequently, ANG-2 modulates ANG-1 activation of Tie2 and, depending on the physiological and biochemical environment, can act either as a n agonist or antagonist of Tie2 induced angiogenesis. The signaling interactions of ANG-1, ANG-2 and Tie2, along with less characterized ANG-3 and ANG-4, are required for embryonic and adult angiogenesis. Physiologically, ANG-1 and ANG-2 are associated with sprouting, tube formation, and structural integrity of newly formed blood vessels. Mature human ANG-2 is a secreted protein containing 480 amino acid residues. ANG-2 is composed of an alpha helix rich “coiled coil” N-terminal domain and fibrinogen like C-

Recombinant human ANG-2 is a C-terminal histidine tagged glycoprotein which migrates with an apparent molecular mass of 60.0– 70.0 kDa by SDS-PAGE under reducing conditions. Sequencing analysis shows an N-terminal sequence starting with residue 68 (D) of the ANG-2 precursor protein.

BIOLOGICAL ACTIVITY:
Determined by its ability to stimulate tubulogenesis in HUVEC cells using a concentration of 0.2 µg/ml.

AMINO ACID SEQUENCE:
DAPLEYDDSV QRLQVLENIM ENNTQWLMKL ENYIQDNMKK EMVEIQQNAV QNQTAVMIEI GTNLLNQTAE QTRKLTDVEA QVLNQTTRLE LQLLEHSLST NKLEKQILDQ TSEINKLQDK NSFLEKKVLA MEDKHIIQLQ SIKEEKDQLQ VLVSKQNSII EELEKKIVTA TVNNSVLQKQ QHDLMETVNN LLTMMSTSNS AKDPTVAKEE QISFRDCAEV FKSGHTTNGI YTLTFPNSTE EIKAYCDMEA GGGGWTIIQR REDGSVDFQR TWKEYKVGFG NPSGEYWLGN EFVSQLTNQQ RYVLKIHLKD WEGNEAYSLY EHFYLSSEEL NYRIHLKGLT GTAGKISSIS QPGNDFSTKD GDNDKCICKC SQMLTGGWWF DACGPSNLNG MYYPQRQNTN KFNGIKWYYW KGSGYSLKAT TMMIRPADFH HHHHH

RELATED PRODUCTS:

- ANG-1, human recombinant **(Cat. No. 7115-10, -50)**
- ANGPTL3 (human) Serum ELISA Kit **(Cat. No. K4914-100)**
- ANGPTL3 (mouse/rat) Serum ELISA Kit **(Cat. No. K4915-100)**
- ANGPTL6 (human) Serum ELISA Kit **(Cat. No. K4916-100)**

FOR RESEARCH USE ONLY! Not to be used in humans.