

Recombinant Human ANG-2

Catalog # PBG10012

Specification

Recombinant Human ANG-2 - Product Information

Recombinant Human ANG-2 - Additional Information

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 α helix rich "coiled coil" N-terminal domain and fibrinogen like C-terminal domain. ANG-2 exists predominantly in the form of a disulfide-linked dimer. 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.

BiologicalActivity

Determined by its ability to stimulate tubulogenesis in HUVEC cells using a concentration of $0.2\mu g/ml$

Authenticity

Verified by N-terminal and Mass Spectrometry analyses (when applicable).

Endotoxin

Endotoxin level is $<0.1 \text{ ng}/\mu\text{g}$ of protein ($<1\text{EU}/\mu\text{g}$).

Protein Content

Verified by UV Spectroscopy and/or SDS-PAGE gel.

Storage

-20°C

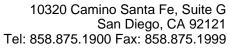
Precautions

Recombinant Human ANG-2 is for research use only and not for use in diagnostic or therapeutic procedures.

Recombinant Human ANG-2 - Protocols

Provided below are standard protocols that you may find useful for product applications.

Western Blot





- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- <u>Immunofluorescence</u>
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Recombinant Human ANG-2 - Images