

ANG-2, Human recombinant protein
ANGPT-2
Catalog # PBV10751r**Specification****ANG-2, Human recombinant protein - Product info**

Primary Accession [O15123](#)
Calculated MW **60-70 kDa KDa**

ANG-2, Human recombinant protein - Additional Info

Gene ID **285**
Gene Symbol **ANGPT2**
Other Names
ANGPT-2

Gene Source **Human**
Source **CHO cells**
Assay&Purity **SDS-PAGE; ≥95%**
Assay2&Purity2 **HPLC;**
Recombinant **Yes**
Sequence **DAPLEYDDSV QRLQVLENIM ENNTQWLMKL
ENYIQDNMKK EMVEIQQNAV QNQTAVMIEI
GTNLLNQTA E QTRKLT DVEA QVLNQTT RLE
LQLEHSLST NKLEKQILDQ TSEINKLQDK
NSFLEKKVLA MEDKHIIQLQ SIKEEKDQLQ
VLVSKQNSII EELEKKIVTA TVNNSVLQKQ
QHDLMETVNN LLTMMSTSNS AKDPTVAKEE
QISFRDCAEV FKSGHTTNGI YTLTFPNSTE
EIKAYCDMEA GGGGWTHIQR REDGSVDFQR
TWKEYKVGFG NPSGEYWLGN EFVSQLTNQQ
RYVLKIHLKD WEGNEAYS LY EHFYLSSEEL
NYRIHLKGLT GTAGKISSIS QPGNDFSTKD
GDNDKCICKC SQMLTGGWWF DACGPSNLNG
MYYPQRQNTN KFNGIKWYYW KGSGYSLKAT
TMMIRPADFH HHHHH**

Target/Specificity
ANG-2

Application Notes

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.

Format

Lyophilized powder

Storage

-20°C; Sterile filtered through a 0.2 micron filter. Lyophilized from 10 mM Sodium Phosphate, pH 8.0.

ANG-2, Human recombinant protein - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

ANG-2, Human recombinant protein - Images

ANG-2, Human recombinant protein - Background

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-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.

ANG-2, Human recombinant protein - References

Maisonpierre P.C.,et al.Science 277:55-60(1997).
Tanaka S.,et al.J. Clin. Invest. 103:341-345(1999).
Kim I.,et al.J. Biol. Chem. 275:18550-18556(2000).
Ota T.,et al.Nat. Genet. 36:40-45(2004).
Nusbaum C.,et al.Nature 439:331-335(2006).