

Human CellExp Angiopoietin-2, mouse recombinant protein
ANGPT2, AGPT2, ANG2, Angiopoietin-2
Catalog # PBV11164r**Specification**

Human CellExp Angiopoietin-2, mouse recombinant protein - Product info

Primary Accession	O35608
Calculated MW	~70 kDa (SDS-PAGE) (aa 19-496 is fused at the N-terminus to a FLAG®-tag) KDa

Human CellExp Angiopoietin-2, mouse recombinant protein - Additional Info

Gene ID	11601
Gene Symbol	ANGPT2
Other Names	
ANGPT2, AGPT2, ANG2, Angiopoietin-2	
Gene Source	Mouse
Source	HEK293 cells
Assay&Purity	SDS-PAGE; ≥95%
Assay2&Purity2	N/A;
Recombinant	Yes
Target/Specificity	
Angiopoietin-2	

Application Notes

Centrifuge the vial prior to opening. Reconstitute with 100 µg sterile water. Do not vortex. This solution can be stored at 2-8°C for up to 1 month. For extended storage, it is recommended to store at -20°C.

Format

Lyophilized

Storage

-20°C; Lyophilized from PBS containing trehalose and Brij35.

Human CellExp Angiopoietin-2, mouse 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](#)

Human CellExp Angiopoietin-2, mouse recombinant protein - Images**Human CellExp Angiopoietin-2, mouse recombinant protein - Background**

Angiopoietin-2, also known as ANGPT2, AGPT2, ANG2, and is a secreted glycoprotein that plays a complex role in angiogenesis and inflammation. Ang2 is widely expressed during development, but it is restricted postnatally to highly angiogenic tissues such as the placenta, ovaries, and uterus. It is particularly abundant in vascular endothelial cells (EC) where it is stored in intracellular Weibel Palade bodies. Both Ang2 and the related Angiopoietin1 (Ang1) are ligands for the receptor tyrosine kinase Tie 2. Ang2 functions as a proangiogenic factor, although it can also induce EC death and vessel regression. Upon its release from quiescent EC, it regulates vascular remodeling by promoting EC survival, proliferation, and migration and destabilizing the interaction between EC and perivascular cells. Ang2 is required for postnatal vascular remodeling, and it cooperates with Ang1 during lymphatic vessel development. It mediates the upregulation of ICAM1 and VCAM1 on EC, which facilitates the adhesion of leukocytes during inflammation. Ang2 competitively inhibit Ang1-induced endothelial cell responses mediated by Tie2, and reduces vascular integrity. But the role of Ang2 is controversial since the opposite outcomes have been reported in other studies. Over-expression of Ang2 disrupts the vascular remodeling, induces endothelial cell apoptosis, and may play an important regulating role in tumor angiogenesis. Ang2 also promotes the neuronal differentiation and migration of sub ventricular zone progenitor cells.

Human CellExp Angiopoietin-2, mouse recombinant protein - References

Maisonpierre P.C.,et al.Science 277:55-60(1997).
Carninci P.,et al.Science 309:1559-1563(2005).