Cynomolgus / Rhesus Angiopoietin-2 / ANG2 Protein (His Tag)

Catalog Number: **90026-C07H**

Sino Biological Inc.
Biological Solution Specialist

General Information

Gene Name Synonym:

Angiopoietin-2, ANG2

Protein Construction:

A DNA sequence encoding the cynomolgus ANGPT2 (XP_005562585.1) (Lys274-Phe495) was expressed with a polyhistidine tag at the N-terminus. Cynomolgus and Rhesus ANGPT2 sequences are identical.

Source: Cynomolgus

Expression Host: Human Cells

QC Testing

Purity: > 95 % as determined by SDS-PAGE.

Bio-Activity:

Measured by its binding ability in a functional ELISA.
Immobilized Cynomolgus ANGPT2 at 10 μg/ml (100 μl /well) can bind Cynomolgus TEK-Fc (Cat:90292-C02H), The EC_{50} of Cynomolgus TEK-Fc (Cat:90292-C02H) is 20-60 ng/ml.

Endotoxin:

< 1.0 EU per μg protein as determined by the LAL method.

Stability:

Samples are stable for up to twelve months from date of receipt at -70 ℃

Predicted N terminal: His

Molecular Mass:

The recombinant cynomolgus ANGPT2 consists 241 amino acids and predicts a molecular mass of 27.7 kDa.

Formulation:

Lyophilized from sterile PBS, pH 7.4.

Normally 5 % - 8 % trehalose and mannitol are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA. Please contact us for any concerns or special requirements.

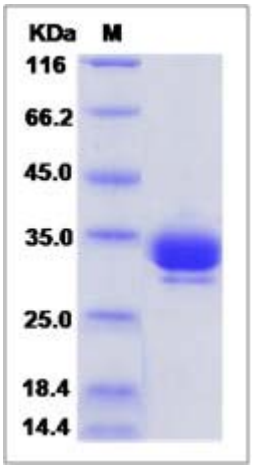
Usage Guide

Storage:

Store it under sterile conditions at -20℃ to -80℃ upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

SDS-PAGE:



Reconstitution:

Detailed reconstitution instructions are sent along with the products.

Protein Description

Angiopoietin 2 (Ang2), closely related to Ang1, is a secreted ligand which binds to the endothelial-specific receptor tyrosine kinase Tie2 with similar affinity. Ang2 is a soluble 70kd growth factor consisting of an amino-terminal coiled-coil domain and a carboxy-terminal fibrinogen-like domain. Tie2 and angiopoietins have been shown to play critical roles in vessel remodeling during angiogenesis, vascular homeostatic responses, and the adult vasculature integrity. Ang2 was initially characterized as an antagonist of Ang1 and Tie2, which 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 has been reported in other studies. Over-expression of Ang2 disrupts the vascular remodeling, induce endothelial cell apoptosis, and may play an important regulating role in tumor angiogenesis.

References

1. Maisonpierre, P.C. et al., 1997, Science 277: 55-60 2. Bezuidenhout, L. et al., 2007, J. Leukoc. Biol. 81: 1496-1503. 3. Tanaka, S. et al., 1999, J. Clin. Invest. 103: 341-345. 4. Yu, Q. et al., 2001, Am. J. Pathol. 158: 563-570. 5. Teichert-Kuliszewska, K. et al., 2001, Circ. Res. 49, 659-670. 6. Schliemann, C. et al., 2007, Leukemia. 21: 1901-1906.