

Recombinant Human ANGPT2 Protein (Met1-Gln248 and Lys275-Phe496), MlgG2a Fc-tagged

Cat. No. ANGPT2-1067H Lot. No. (See product label)

SPECIFICATION

Product Overview Recombinant Human ANGPT2 Protein (NP_001138.1) (Met1-Gln248 and Lys275-Phe496 linked by a polypeptide linker) was produced by HEK293 Cells expression system. This protein was expressed with the Fc region of mouse IgG2a at the C-terminus.

Species Human

Source HEK293

ProteinLength Met1-Gln248 and Lys275-Phe496

Description Angiopoietin-2 (ANG 2, or ANGPT2), is a member of the ANG family, which plays an important role in angiogenesis during the development and growth of human cancers. Both ANGPT-1 and ANGPT-2 appear to bind to the tyrosine kinase receptor, Tie-2, found primarily on the luminal surface of endothelial cells. ANG-2's role in angiogenesis generally is considered as an antagonist for ANG1, inhibiting ANG1-promoted Tie2 signaling, which is critical for blood vessel maturation and stabilization. ANG-2 modulates angiogenesis in a cooperative manner with another important angiogenic factor, vascular endothelial growth factor A. Genetic studies have revealed that ANG-2 also is critical in lymphangiogenesis during development. ANG-2 has multiple physiologic effects that regulate vascular tone, hormone secretion, tissue growth and neural activity. Several reports indicate that ANG-2 can induce neovascularization in experimental systems due to the expression of different growth

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factors such as angiopoietin 2, vascular endothelial factor, and its receptor, fibroblast growth factor, platelet derived growth factor, transforming growth factor beta and epidermal growth factor. In addition, ANG-2 is strongly expressed in the vasculature of many tumors and it has been suggested that ANG-2 may act synergistically with other cytokines such as vascular endothelial growth factor to promote tumor-associated Angiogenesis and tumor progression.

Predicted N Terminal Tyr 19

Form Lyophilized from sterile PBS, pH 7.4. Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization.

Molecular Mass The recombinant human ANGPT2 consists of 708 amino acids and predicts a molecular mass of 80.3 kDa.

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

Purity > 85 % as determined by SDS-PAGE.

Stability Samples are stable for up to twelve months from date of receipt at -70 centigrade.

Storage Store it under sterile conditions at -20 centigrade to -80 centigrade. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.

Reconstitution It is recommended that sterile water be added to the vial to prepare a stock solution of 0.2 mg/ml. Centrifuge the vial at 4°C before opening to recover the entire contents.

Shipping In general, recombinant proteins are provided as lyophilized powder which are shipped at ambient temperature.

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Bulk packages of recombinant proteins are provided as frozen liquid. They are shipped out with blue ice unless customers require otherwise.

GENE INFORMATION

Gene Name	ANGPT2 angiotensinogen 2 [Homo sapiens]
Official Symbol	ANGPT2
Synonyms	ANGPT2; angiotensinogen 2; angiotensinogen-2; Ang2; ANG-2; Tie2-ligand; angiotensin-2B; ANG2; AGPT2;
Gene ID	285
mRNA Refseq	NM_001118887
Protein Refseq	NP_001112359
MIM	601922
UniProt ID	O15123

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