

Angiopoietin-2 Protein, Human (Biotinylated, HEK293, His-Avi)

Cat. No.:	HY-P78061
Synonyms:	AGPT2; ANG2; ANG-2; angiopoietin 2; Angiopoietin-2; angiopoietin-2a; angiopoietin-2B; angiopoitin 2; ANGPT2; Tie2-ligand
Species:	Human
Source:	HEK293
Accession:	O15123-1 (K275-F496)
Gene ID:	285
Molecular Weight:	32-37 kDa

PROPERTIES

Biological Activity	Immobilized Biotinylated Human ANGPT2 His at 5 µg/mL (100µL/Well) on the Streptavidin Proccated plate. Dose response curve for Anti-ANGPT2 Antibody hFc with the EC ₅₀ of ≤ 6.7 ng/mL determined by ELISA.
Appearance	Lyophilized powder.
Formulation	Lyophilized from a 0.22 µm filtered solution of PBS, pH 7.4. Normally 5% trehalose is added as protectant before lyophilization.
Endotoxin Level	<1 EU/µg, determined by LAL method.
Reconstitution	It is not recommended to reconstitute to a concentration less than 100 µg/mL in ddH ₂ O.
Storage & Stability	Stored at -20°C for 2 years. After reconstitution, it is stable at 4°C for 1 week or -20°C for longer (with carrier protein). It is recommended to freeze aliquots at -20°C or -80°C for extended storage.
Shipping	Room temperature in continental US; may vary elsewhere.

DESCRIPTION

Background	The Angiopoietin-2 (ANGPT2) protein binds to TEK/TIE2, competing for the ANGPT1 binding site and thereby modulating ANGPT1 signaling. This interaction can induce the tyrosine phosphorylation of TEK/TIE2 even in the absence of ANGPT1. In the absence of angiogenic inducers, such as VEGF, ANGPT2's action leads to the loosening of cell-matrix contacts, potentially inducing endothelial cell apoptosis and consequent vascular regression. However, in the presence of VEGF, ANGPT2 collaborates to facilitate endothelial cell migration and proliferation, acting as a permissive angiogenic signal. Furthermore, ANGPT2 is involved in the regulation of lymphangiogenesis. The protein also interacts with TEK/TIE2, competing for the same binding site as ANGPT1, and additionally interacts with ITGA5, contributing to its multifaceted role in angiogenesis and vascular regulation.
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Caution: Product has not been fully validated for medical applications. For research use only.

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