

Angiotensin-1 Protein, Human (HEK293, Fc)

Cat. No.:	HY-P70061
Synonyms:	rHuAngiotensin-1/ANG1, Fc; AGP1; AGPT; Ang1; ANG-1; angiotensin 1; Angiotensin-1; ANGPT1
Species:	Human
Source:	HEK293
Accession:	Q15389 (D256-F498)
Gene ID:	284
Molecular Weight:	Approximately 57.25 kDa

PROPERTIES

AA Sequence	<p> D T V H N L V N L C T K E G V L L K G G K R E E E K P F R D C A D V Y Q A G F N K S G I Y T I Y I N N M P E P K K V F C N M D V N G G G W T V I Q H R E D G S L D F Q R G W K E Y K M G F G N P S G E Y W L G N E F I F A I T S Q R Q Y M L R I E L M D W E G N R A Y S Q Y D R F H I G N E K Q N Y R L Y L K G H T G T A G K Q S S L I L H G A D F S T K D A D N D N C M C K C A L M L T G G W W F D A C G P S N L N G M F Y T A G Q N H G K L N G I K W H Y F K G P S Y S L R S T T M M I R P L D F </p>
Biological Activity	Measured by the ability of the immobilized protein to support the adhesion of HUVEC human umbilical vein endothelial cells. The ED ₅₀ for this effect is 356.9 ng/ml, corresponding to a specific activity is 2801.905 units/mg.
Appearance	Lyophilized powder.
Formulation	Lyophilized from a 0.2 µm filtered solution of PBS, pH 7.4 or 20 mM PB, 150 mM NaCl, pH 7.4.
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. For long term storage it is recommended to add a carrier protein (0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose).
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	Angiotensin-1 is a secreted protein ligand for 'tunica interna endothelial cell kinase. Angiotensin-1 is primarily expressed in growing vascular ECs and a subset of hematopoietic cells. Ang 1 can induce distinctive vascular remodeling through highly
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organized angiogenesis and tightening of endothelial cell (EC) junctions^[1].

The structure of Ang1 consists a carboxyl-terminal fibrinogen-like domain that can binds to the Tie2 receptor (a central coiled-coil domain).

Ang1 plays critical roles in vascular assembly, maturation and stabilization, coronary venogenesis and glomerular vascular protection during developmental and pathological angiogenesis^[2].

REFERENCES

[1]. Gou Young Koh, et al. Orchestral actions of angiopoietin-1 in vascular regeneration. Trends Mol Med. 2013 Jan;19(1):31-9.

[2]. Nuri Oh, et al. A Designed Angiopoietin-1 Variant, Dimeric CMP-Ang1 Activates Tie2 and Stimulates Angiogenesis and Vascular Stabilization in N-glycan Dependent Manner.Sci Rep. 2015 Oct 19;5:15291.

Caution: Product has not been fully validated for medical applications. For research use only.

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