Recombinant Human ANG Protein, His-tagged

Cat. No. ANG-148H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Human ANG Protein (Asn79-Pro466) with N-His tag was expressed in E. coli.
Species	Human
Source	E.coli
ProteinLength	Asn79-Pro466
Description	The protein encoded by this gene is a member of the RNase A superfamily though it has relatively weak ribonucleolytic activity. This protein is a potent mediator of new blood vessel formation and thus, in addition to the name RNase5, is commonly called angiogenin. This protein induces angiogenesis after binding to actin on the surface of endothelial cells. This protein also accumulates at the nucleolus where it stimulates ribosomal transcription. Under stress conditions this protein translocates to the cytosol where it hydrolyzes cellular tRNAs and influences protein synthesis. A signal peptide is cleaved from the precursor protein to produce a mature protein which contains a nuclear localization signal, a cell binding motif, and a catalytic domain. This protein has been shown to be both neurotrophic and neuroprotective and the mature protein has antimicrobial activity against some bacteria and fungi, including S. pneumoniae and C. albicans. Due to its effect on rRNA production and angiogenesis this gene plays important roles in cell growth and tumor progression. Mutations in this gene are associated with progression of amyotrophic lateral sclerosis (ALS). This gene and the neighboring RNase4 gene share promoters and 5' exons though each

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	gene then splices to a distinct 3' exon containing the complete coding region of each gene. Alternative splicing results in multiple transcript variants encoding the same protein.
Form	Freeze-dried powder
Molecular Mass	Predicted Molecular Mass: 45.3 kDa Accurate Molecular Mass: 55 kDa
Purity	> 90%
Applications	Positive Control; Immunogen; SDS-PAGE; WB.
Stability	The thermal stability is described by the loss rate. The loss rate was determined by accelerated thermal degradation test, that is, incubate the protein at 37 centigrade for 48h, and no obvious degradation and precipitation were observed. The loss rate is less than 5% within the expiration date under appropriate storage condition.
Storage	Avoid repeated freeze/thaw cycles. Store at 2-8 centigrade for one month. Aliquot and store at -80 centigrade for 12 months.
Storage Buffer	PBS, pH7.4, containing 0.01% SKL, 1 mM DTT, 5% Trehalose and Proclin300.
Reconstitution	Reconstitute in sterile water to a concentration of 0.1-1.0 mg/mL. Do not vortex.

GENE INFORMATION

Gene Name	ANG angiogenin, ribonuclease, RNase A family, 5 [Homo sapiens (human)]
Official Symbol	ANG

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Synonyms	ANG; angiogenin, ribonuclease, RNase A family, 5; angiogenin; RNASE5; RNase 5; ribonuclease 5; epididymis luminal protein 168; ALS9; HEL168; RNASE4; MGC22466; MGC71966
Gene ID	283
mRNA Refseq	NM_001097577
Protein Refseq	NP_001091046
MIM	105850
UniProt ID	P03950

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