

Product datasheet for PH308874

Angiogenin (ANG) (NM_001145) Human Mass Spec Standard

Product data:

Product Type:	Mass Spec Standards
Description:	ANG MS Standard C13 and N15-labeled recombinant protein (NP_001136)
Species:	Human
Expression Host:	HEK293
Expression cDNA Clone or AA Sequence:	RC208874
Predicted MW:	16.6 kDa
Protein Sequence:	>RC208874 protein sequence Red=Cloning site Green=Tags(s) MVMGLGVLLLVFVLGGLTPPTLAQDNSRYTHFLTQHYDAKPQGRDDRYCESIMRRRGLTSPCKDINTFI HGNKRSIKAICENKNGNPHRENLRISKSSFQVTTCKLHGGSPWPPCQYRATAGFRNVVVACENGLPVHLD QSIFRRP TRTRPLEQKLI SEEDLAANDILDYKDDDDKV
Tag:	C-Myc/DDK
Purity:	> 80% as determined by SDS-PAGE and Coomassie blue staining
Concentration:	>0.05 µg/µL as determined by microplate BCA method
Labeling Method:	Labeled with [U- ¹³ C ₆ , ¹⁵ N ₄]-L-Arginine and [U- ¹³ C ₆ , ¹⁵ N ₂]-L-Lysine
Buffer:	25 mM Tris-HCl, 100 mM glycine, pH 7.3
Storage:	Store at -80°C. Avoid repeated freeze-thaw cycles.
Stability:	Stable for 3 months from receipt of products under proper storage and handling conditions.
RefSeq:	NP_001136
RefSeq Size:	1222
RefSeq ORF:	441
Synonyms:	ALS9; HEL168; RAA1; RNASE4; RNASE5
Locus ID:	283
UniProt ID:	P03950 , W0UV28



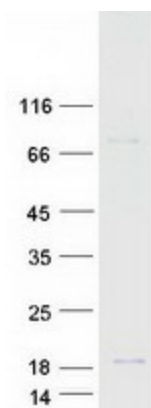
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Cytogenetics: 14q11.2

Summary: 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 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. [provided by RefSeq, Jul 2020]

Protein Families: Druggable Genome, Secreted Protein, Transmembrane

Product images:



Coomassie blue staining of purified ANG protein (Cat# [TP308874]). The protein was produced from HEK293T cells transfected with ANG cDNA clone (Cat# [RC208874]) using MegaTran 2.0 (Cat# [TT210002]).