

## Product datasheet for **SC201873**

### Angiogenin (ANG) (NM\_001097577) Human 3' UTR Clone

#### Product data:

Product Type:	3' UTR Clones
Product Name:	Angiogenin (ANG) (NM_001097577) Human 3' UTR Clone
Symbol:	Angiogenin
Synonyms:	ALS9; HEL168; RAA1; RNASE4; RNASE5
Mammalian Cell Selection:	Neomycin
Vector:	pMirTarget (PS100062)
ACCN:	NM_001097577
Insert Size:	205 bp
Insert Sequence:	>SC201873 3'UTR clone of NM_001097577 The sequence shown below is from the reference sequence of NM_001097577. The complete sequence of this clone may contain minor differences, such as SNPs. <b>Blue</b> =Stop Codon <b>Red</b> =Cloning site  GGCAAGTTGGACGCCCGCAAGATCCGCGAGATTCTCATTAAAGCCAAGAAGGGCGGAAAGATCGCCGTG TAACAATTGGCAGAGCTCAGAATTCAA <b>GCGATCGCC</b> TTGGATCAGTCAATTTCCGTCGTCCG <b>TA</b> CCAGCGGGCCCTGGTCAAGTGTGGCTCTGCTGTCCTT GCCTTCCATTTCCCTCTGCACCCAGAACAGTGGTGGCAACATTCATTGCCAAGGGCCCAAAGAAAGAG CTACCTGGACCTTTGTTTTCTGTTTGACAACATGTTAATAAAATAAAATGTCTTGATATCAGTAA <b>ACGCGT</b> AAGCGGCCGCGCATCTAGATTGAAGAAAATGACCGACCAAGCGACGCCCAACCTGCCATCA CGAGATTTGATTCCACCGCCGCTTCTATGAAAGG
Restriction Sites:	Sgfl-MluI
OTI Disclaimer:	Our molecular clone sequence data has been matched to the sequence identifier above as a point of reference. Note that the complete sequence of this clone is largely the same as the reference sequence but may contain minor differences , e.g., single nucleotide polymorphisms (SNPs).
Components:	The cDNA clone is shipped in a 2-D bar-coded Matrix tube as 10 ug dried plasmid DNA. The package also includes 100 pmols of both the corresponding 5' and 3' vector primers in separate vials.
RefSeq:	<u><a href="#">NM_001097577.3</a></u>



**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]

**Locus ID:**

283

**MW:**

7.3