

CAB1546

Product Information

Product SKU:	CAB1546	Gene ID:	283	Size:	20uL, 100uL
Clone No:	-	Host Species:	Rabbit	Reactivity:	Rat

Additional Information

Observed MW:	14kDa	Conjugate:	Unconjugated
Calculated MW:	17kDa	Isotype:	IgG

Immunogen Information

Background: 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.

Recommended Dilution: WB,1:500 - 1:1000

Synonyms: ALS9; RAA1; HEL168; RNASE4; RNASE5; ANG

Purification Method: Affinity purification

Immunogen: Recombinant fusion protein containing a sequence corresponding to amino acids 25-147 of human ANG (NP_001136.1).

Storage: Store at -20°C. Avoid freeze / thaw cycles. Buffer: PBS with 0.02% sodium azide, 50% glycerol, pH7.3.