

ARG43914 anti-Angiogenin antibody

Package: 50 µg
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes Angiogenin
Tested Reactivity	Rat
Tested Application	ELISA, WB
Host	Rabbit
Clonality	Polyclonal
Target Name	Angiogenin
Species	Rat
Immunogen	Rat Angiogenin recombinant protein
Conjugation	Un-conjugated
Alternate Names	ANG; Angiogenin; RNASE5; RAA1; Angiogenin, Ribonuclease, RNase A Family, 5; Ribonuclease A Family Member 5; Ribonuclease 5; RNase 5; Epididymis Luminal Protein 168; Ribonuclease A A1; EC 3.1.27.- ; EC 3.1.27; HEL168; RNASE4; ALS9

Application Instructions

Application table	Application	Dilution
	ELISA	0.1-0.5 µg/ml
	WB	0.25-0.5 µg/ml
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	

Properties

Form	Liquid
Buffer	0.9% NaCl, 0.2% Na ₂ HPO ₄ and 4% Trehalose.
Stabilizer	4% Trehalose
Concentration	0.5 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.

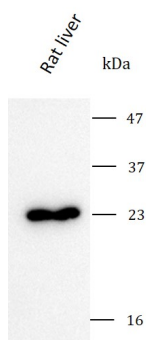
Bioinformation

Gene Symbol	ANG
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Gene Full Name	Angiogenin
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 <i>S. pneumoniae</i> and <i>C. albicans</i> . 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.
Function	Ribonuclease that cleaves tRNA within anticodon loops to produce tRNA-derived stress-induced fragments (tiRNAs) which inhibit protein synthesis and triggers the assembly of stress granules (SGs).
Calculated Mw	17 kDa
PTM	Disulfide bond, Pyrrolidone carboxylic acid
Cellular Localization	Cytoplasmic vesicle, Nucleus, Secreted

Images

ARG43914 anti-Angiogenin antibody WB image



Western blot: Rat liver stained with ARG43914 anti-Angiogenin antibody at 0.5 µg/mL dilution.