

Angiogenin Polyclonal Antibody(Capture/Detector)

catalog number: AN002440P

Note: Centrifuge before opening to ensure complete recovery of vial contents.

Description

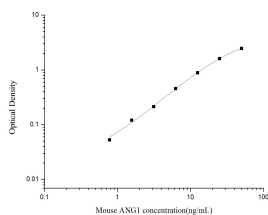
Reactivity	Mouse
Immunogen	Recombinant Mouse Angiogenin protein expressed by E.coli
Host	Rabbit
Isotype	Rabbit IgG
Purification	Antigen Affinity Purification
Conjugation	Unconjugated
Buffer	Phosphate buffered solution, pH 7.2, containing 0.05% proclin 300.

Applications

Recommended Dilution

ELISA Capture	2-8 µg/mL
ELISA Detector	0.1-0.4 µg/mL

Data



Sandwich ELISA-Recombinant Mouse Angiogenin protein standard curve. Background subtracted standard curve using Angiogenin antibody(AN002440P)(Capture), Angiogenin antibody(AN002440P)(Detector) in sandwich ELISA. The reference range value for Recombinant Mouse Angiogenin protein is 0.78-50 ng/mL.

Preparation & Storage

Storage	Store at 4°C valid for 12 months or -20°C valid for long term storage, avoid freeze / thaw cycles.
Shipping	The product is shipped with ice pack, upon receipt, store it immediately at the temperature recommended.

Background

For Research Use Only

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.