

A13465

Leader in Biomolecular Solutions for Life Science



ANG Rabbit pAb

Catalog No.: A13465

Basic Information

Observed MW

13kDa

Calculated MW

17kDa

Category

Polyclonal Antibody

Applications

WB,IF/ICC,ELISA

Cross-Reactivity

Human,Mouse,Rat

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 Dilutions

WB	1:500 - 1:2000
IF/ICC	1:50 - 1:200

Immunogen Information

Gene ID	Swiss Prot
283	P03950

Immunogen

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

Synonyms

ALS9; RAA1; HEL168; RNASE4; RNASE5; ANG

Contact



www.abclonal.com

Product Information

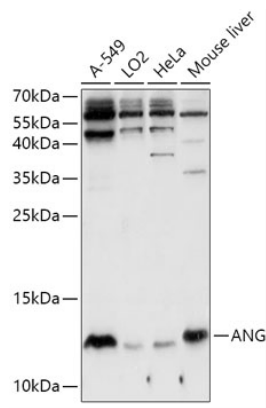
Source	Isotype	Purification
Rabbit	IgG	Affinity purification

Storage

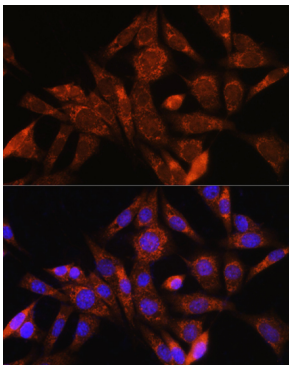
Store at -20°C. Avoid freeze / thaw cycles.

Buffer: PBS with 0.01% thimerosal,50% glycerol,pH7.3.

Validation Data



Western blot analysis of various lysates using ANG Rabbit pAb (A13465) at 1:1000 dilution.
Secondary antibody: HRP Goat Anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.
Lysates/proteins: 25µg per lane.
Blocking buffer: 3% nonfat dry milk in TBST.
Detection: ECL Basic Kit (RM00020).
Exposure time: 3min.



Immunofluorescence analysis of NIH/3T3 cells using ANG Rabbit pAb (A13465) at dilution of 1:100. Secondary antibody: Cy3 Goat Anti-Rabbit IgG (H+L) (AS007) at 1:500 dilution. Blue: DAPI for nuclear staining.