

Angiogenin / ANG Antibody (Internal)
Rabbit Polyclonal Antibody
Catalog # ALS15646**Specification****Angiogenin / ANG Antibody (Internal) - Product Information**

Application	IHC, IF, WB
Primary Accession	P03950
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Calculated MW	17kDa KDa

Angiogenin / ANG Antibody (Internal) - Additional Information**Gene ID** 283**Other Names**

Angiogenin, 3.1.27.-, Ribonuclease 5, RNase 5, ANG, RNASE5

Target/Specificity

Human ANG. Two alternatively spliced transcript variants have been observed.

Reconstitution & Storage

Long term: -20°C; Short term: +4°C. Avoid repeat freeze-thaw cycles.

Precautions

Angiogenin / ANG Antibody (Internal) is for research use only and not for use in diagnostic or therapeutic procedures.

Angiogenin / ANG Antibody (Internal) - Protein Information**Name** ANG**Synonyms** RNASE5**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) (PubMed: [1400510](http://www.uniprot.org/citations/1400510), PubMed: [21855800](http://www.uniprot.org/citations/21855800)). Binds to actin on the surface of endothelial cells; once bound, angiogenin is endocytosed and translocated to the nucleus (PubMed: [8127865](http://www.uniprot.org/citations/8127865)). Stimulates ribosomal RNA synthesis including that containing the initiation site sequences of 45S rRNA (PubMed: [12051708](http://www.uniprot.org/citations/12051708)). Angiogenin induces vascularization of normal and malignant tissues (PubMed: [19354288](http://www.uniprot.org/citations/19354288)). Angiogenic

activity is regulated by interaction with RNH1 in vivo (PubMed:19354288).

Cellular Location

Cytoplasmic vesicle, secretory vesicle lumen {ECO:0000250|UniProtKB:Q3TMQ6}. Secreted {ECO:0000250|UniProtKB:P10152}. Nucleus. Nucleus, nucleolus. Note=Rapidly endocytosed by target cells and translocated to the nucleus where it accumulates in the nucleolus and binds to DNA (PubMed:12051708)

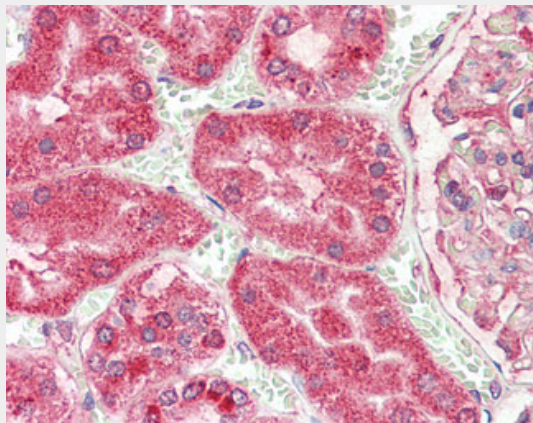
Tissue Location

Expressed predominantly in the liver. Also detected in endothelial cells and spinal cord neurons

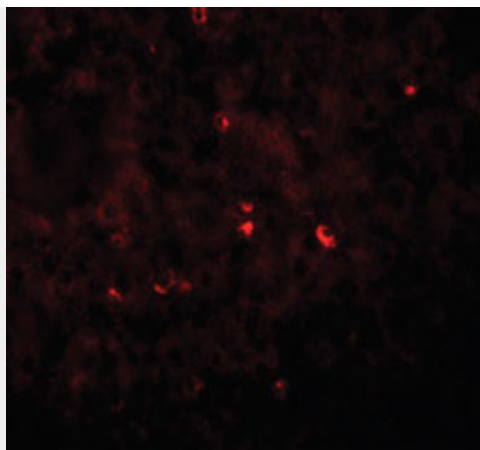
Angiogenin / ANG Antibody (Internal) - Protocols

Provided below are standard protocols that you may find useful for product applications.

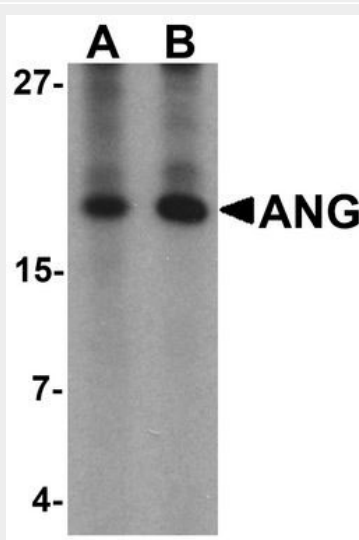
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Angiogenin / ANG Antibody (Internal) - Images

Anti-Angiogenin / ANG antibody IHC staining of human kidney.



Immunofluorescence of ANG in human liver tissue with ANG antibody at 20 ug/ml.



Western blot analysis of ANG in rat liver tissue lysate with Ang antibody at (A) 1 and (B) 2 ug/ml.

Angiogenin / ANG Antibody (Internal) - Background

Binds to actin on the surface of endothelial cells; once bound, angiogenin is endocytosed and translocated to the nucleus. Stimulates ribosomal RNA synthesis including that containing the initiation site sequences of 45S rRNA. 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). Angiogenin induces vascularization of normal and malignant tissues. Angiogenic activity is regulated by interaction with RNH1 in vivo.

Angiogenin / ANG Antibody (Internal) - References

- Kurachi K.,et al.Biochemistry 24:5494-5499(1985).
- Zhang J.,et al.Mol. Biol. Evol. 19:438-445(2002).
- Li J.,et al.Submitted (SEP-2008) to the EMBL/GenBank/DDBJ databases.
- Ebert L.,et al.Submitted (MAY-2004) to the EMBL/GenBank/DDBJ databases.
- Wakamatsu A.,et al.Submitted (JAN-2008) to the EMBL/GenBank/DDBJ databases.