

Angiogenin / ANG Antibody (aa176-224) Rabbit Polyclonal Antibody Catalog # ALS16232

# Specification

# Angiogenin / ANG Antibody (aa176-224) - Product Information

Application Primary Accession Reactivity Host Clonality Calculated MW WB, IHC <u>P03950</u> Human, Mouse, Rat Rabbit Polyclonal 17kDa KDa

# Angiogenin / ANG Antibody (aa176-224) - Additional Information

Gene ID 283

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

Target/Specificity Human Angiogenin / ANG

**Reconstitution & Storage** Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze-thaw cycles.

**Precautions** Angiogenin / ANG Antibody (aa176-224) is for research use only and not for use in diagnostic or therapeutic procedures.

### Angiogenin / ANG Antibody (aa176-224) - 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:<a href="http://www.uniprot.org/citations/1400510"

target="\_blank">1400510</a>, PubMed:<a href="http://www.uniprot.org/citations/21855800" target="\_blank">21855800</a>). Binds to actin on the surface of endothelial cells; once bound, angiogenin is endocytosed and translocated to the nucleus (PubMed:<a

href="http://www.uniprot.org/citations/8127865" target="\_blank">8127865</a>). Stimulates ribosomal RNA synthesis including that containing the initiation site sequences of 45S rRNA (PubMed:<a href="http://www.uniprot.org/citations/12051708" target="\_blank">12051708</a>). Angiogenin induces vascularization of normal and malignant tissues (PubMed:<a href="http://www.uniprot.org/citations/19354288" target="\_blank">19354288</a>). Angiogenic



activity is regulated by interaction with RNH1 in vivo (PubMed:<a href="http://www.uniprot.org/citations/19354288" target="\_blank">19354288</a>).

**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

Volume 50 μl

# Angiogenin / ANG Antibody (aa176-224) - Protocols

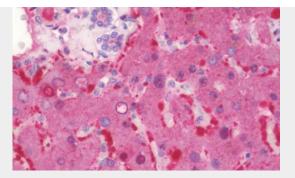
Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

Angiogenin / ANG Antibody (aa176-224) - Images

Western blot of p-CD318 (Y707) pAb in extracts from HeLa cells.





Anti-Angiogenin / ANG antibody IHC staining of human liver. Angiogenin / ANG Antibody (aa176-224) - 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 (aa176-224) - 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.