

**Anti-Angiogenin/ANG Picoband Antibody**  
**Catalog # ABO10025****Specification**

---

**Anti-Angiogenin/ANG Picoband Antibody - Product Information**

|                   |                        |
|-------------------|------------------------|
| Application       | WB                     |
| Primary Accession | <a href="#">P03950</a> |
| Host              | Rabbit                 |
| Reactivity        | Human                  |
| Clonality         | Polyclonal             |
| Format            | Lyophilized            |

**Description**

Rabbit IgG polyclonal antibody for Angiogenin(ANG) detection. Tested with WB, ELISA in Human.

**Reconstitution**

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

**Anti-Angiogenin/ANG Picoband Antibody - Additional Information**

**Gene ID** 283

**Other Names**

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

**Calculated MW**

16550 MW KDa

**Application Details**

ELISA , 0.1-0.5 µg/ml, Human, -<br>Western blot, 0.1-0.5 µg/ml, Human<br>

**Subcellular Localization**

Nucleus . Secreted, extracellular space, extracellular matrix, basement membrane. Nucleus, nucleolus. Rapidly endocytosed by target cells and translocated to the nucleus where it accumulates in the nucleolus and binds to DNA.

**Tissue Specificity**

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

**Protein Name**

Angiogenin

**Contents**

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na<sub>2</sub>HPO<sub>4</sub>, 0.05mg NaN<sub>3</sub>.

**Immunogen**

E. coli-derived human Angiogenin/ANG recombinant protein (Position: Q25-P147). Human Angiogenin/ANG shares 77.5% amino acid (aa) sequence identity with mouse Angiogenin/ANG.

**Purification**

Immunogen affinity purified.

**Cross Reactivity**

No cross reactivity with other proteins.

**Storage**

**At -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing and thawing.**

**Anti-Angiogenin/ANG Picoband Antibody - 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**

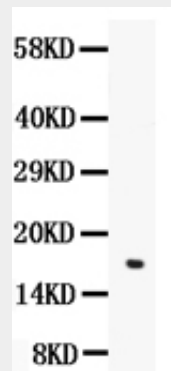
Expressed predominantly in the liver. Also detected in endothelial cells and spinal cord neurons

**Anti-Angiogenin/ANG Picoband Antibody - 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](#)

**Anti-Angiogenin/ANG Picoband Antibody - Images**



Western blot analysis of Angiogenin/ANG expression in Recombinant Human ANG Protein 1ng (lane 1). Angiogenin/ANG at 17KD was detected using rabbit anti- Angiogenin/ANG Antigen Affinity purified polyclonal antibody (Catalog # ABO10025) at 0.5  $\mu$ g/mL. The blot was developed using chemiluminescence (ECL) method .

#### **Anti-Angiogenin/ANG Picoband Antibody - Background**

Angiogenin (Ang), also known as ribonuclease 5, is a small 123 amino acid protein that in humans is encoded by the ANG gene. The protein encoded by this gene is an exceedingly potent mediator of new blood vessel formation. It hydrolyzes cellular tRNAs resulting in decreased protein synthesis and is similar to pancreatic ribonuclease. In addition, the mature peptide has antimicrobial activity against some bacteria and fungi, including *S. pneumoniae* and *C. albicans*. Alternative splicing results in two transcript variants encoding the same protein. This gene and the gene that encodes ribonuclease, RNase A family, 4 share promoters and 5' exons. Each gene splices to a unique downstream exon that contains its complete coding region.