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ANG Antibody (Center) Blocking peptide

Synthetic peptide
Catalog # BP10663c

Specification

ANG Antibody (Center) Blocking peptide - Product Information

Primary Accession P03950

ANG Antibody (Center) Blocking peptide - Additional Information

Gene ID 283

Other Names
Angiogenin, 3127-, Ribonuclease 5, RNase 5, ANG, RNASE5

Format
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

ANG Antibody (Center) Blocking peptide - 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, PubMed:21855800). Binds to actin on the surface of endothelial cells; once bound, angiogenin is endocytosed and translocated to the nucleus (PubMed:8127865). Stimulates ribosomal RNA synthesis including that containing the initiation site sequences of 45S rRNA (PubMed:12051708). Angiogenin induces vascularization of normal and malignant tissues (PubMed: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

ANG Antibody (Center) Blocking peptide - Protocols

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

- Blocking Peptides

ANG Antibody (Center) Blocking peptide - Images

ANG Antibody (Center) Blocking peptide - Background

ANG is an exceedingly potentmediator of new blood vessel formation. It hydrolyzes cellulartRNAs resulting in decreased protein synthesis and is similar topancreatic ribonuclease.

ANG Antibody (Center) Blocking peptide - References

Romero, R., et al. Am. J. Obstet. Gynecol. 203 (4), 361 (2010) :Millecamps, S., et al. J. Med. Genet. 47(8):554-560(2010)Cho, G.W., et al. Mol. Cell. Biochem. 340 (1-2), 133-141 (2010) :Tsai, C.P., et al. Neurobiol. Aging (2010) In press :Romero, R., et al. Am. J. Obstet. Gynecol. 202 (5), 431 (2010) :