Human Angiogenin Alexa Fluor® 750-conjugated Antibody

Monoclonal Mouse IgG_1 Clone # 14017

Catalog Number: FAB265S

100 µg

DESCRIPTION

Species Reactivity	Human
Specificity	Detects recombinant human Angiogenin in direct ELISAs and Western blots. When used in combination with biotinylated anti-human Angiogenin detection antibody (Catalog # BAF265) in sandwich ELISAs, no significant cross-reactivity or interfere
Source	Monoclonal Mouse IgG_1 Clone # 14017
Purification	Protein A or G purified from ascites
Immunogen	*E. coli*-derived recombinant human Angiogenin Gln25-Pro147 Accession # P03950
Conjugate	Alexa Fluor 750 Excitation Wavelength: 749 nm Emission Wavelength: 775 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

APPLICATIONS

Please Note: *Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.*

ELISA Capture (Matched Antibody Pair)	Optimal dilution of this antibody should be experimentally determined.
ELISA Detection (Matched Antibody Pair)	Optimal dilution of this antibody should be experimentally determined.
Western Blot	Optimal dilution of this antibody should be experimentally determined.

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

BACKGROUND

Angiogenin was initially purified from serum-free media conditioned by growth of a human adenocarcinoma cell line HT-29 based on its ability to initiate vascularization in the chicken embryo chorioallantoic membrane. A number of other tumor, as well as normal, cell lines can also secrete Angiogenin. In addition, Angiogenin is present in normal human plasma at levels as high as 60 - 120 ng/mL. Unlike other angiogenic factors such as FGF, Angiogenin is neither mitogenic nor chemotactic for vascular endothelial cells *in vitro*. However, Angiogenin can stimulate capillary and umbilical vein endothelial cells to produce diacylglycerol and secrete prostacyclin by phospholipase activation. Angiogenin, absorbed on plastic, can also support endothelial and fibroblast cell adhesion and spreading. Surprisingly, Angiogenin has been found to be a member of the ribonuclease superfamily with approximately 35% sequence similarity at the amino acid level with pancreatic RNase. Angiogenin exhibits ribonucleolytic activity that is distinctly different than that of pancreatic RNase A. The ribonucleolytic activity of Angiogenin toward most RNase A substrates is much lower than that of RNase A. Nevertheless, the ribonucleolytic activity of Angiogenin is essential to its angiogenic activity since inhibition of the Angiogenin RNase activity will also abolish angiogenesis activity. Similar to several members of the RNase superfamily, Angiogenin is a cytotoxic agent that can abolish cellular protein synthesis. It has been demonstrated that Angiogenin-dependent protein synthesis inhibition can be attributed to the function of Angiogenin as a cytotoxic tRNA-specific RNAase. A cell-surface Angiogenin binding protein has been purified and characterized. Tryptic peptide mapping and sequence analysis indicate that this binding protein is a member of the actin family.

PRODUCT SPECIFIC NOTICES

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