Datasheet: 0555-5008

Description:	MOUSE ANTI HUMAN ANGIOGENIN
Specificity:	ANGIOGENIN
Format:	S/N
Product Type:	Monoclonal Antibody
Clone:	MANG-1
Isotype:	IgM
Quantity:	0.15 mg

Product Details

Applications

This product has been reported to work in the following applications. This information is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information. For general protocol recommendations, please visit www.bio-rad-antibodies.com/protocols.

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry			▪	
Immunohistology - Frozen	▪			1/60
Immunohistology - Paraffin (1)	▪			1/30
ELISA	▪			
Immunoprecipitation			▪	
Western Blotting			▪	

Where this product has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. Suggested working dilutions are given as a guide only. It is recommended that the user titrates the product for use in their own system using the appropriate negative/positive controls.

(1)**Proteinase K pretreatment for antigen retrieval is recommended for use with paraffin sections.See Marioni *et al.* 2011**

Target Species	Human
Product Form	Tissue Culture Supernatant - lyophilised
Reconstitution	500 µl sterile deionised water
Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	0.01% Thiomersal 1% Bovine Serum Albumin
Approx. Protein Concentrations	IgG concentration 0.3 mg/ml
Immunogen	Recombinant human angiogenin

External Database Links	**UniProt:** P03950 Related reagents **Entrez Gene:** 283 ANG Related reagents
Synonyms	RNASE5
Specificity	**Mouse anti Human Angiogenin anibody, clone MANG-1** is a monoclonal antibody specific for angiogenin, a potent angiogenesis inducing polypeptide of approximately 16.5kDa responsible for inducing vascularization in both normal and malignant tissues through activation of vascular endothelium and smooth muscle cells ant triggering a number of processes including Cell migration and proliferation (Reviewed in Gao *et al.*2008) Angiogenin, also known as ribonuclease 5 demonstrates tRNA specific ribonuclease activity (Saxena *et al.* 1992), this in turn is regulated by binding to the ribonuclease inhibitor RNH1 (Tuefel *et al.* 2003) . Angiogenin exerts its vascular stimulation potential through binding to cytoplasmic actin on the surface of endothelial cells, followed by endocytosis and subsequent translocation to the nucleus Mouse anti Angiogenin, clone MANG1 stains single cells on human tonsil sections and endothelial cells in human terminal placenta. MANG-1 also demonstrates intense staining on carcinoma cells and of endothelial cells in intratumoral vessels (Marioni *et al.* 2010)
Histology Positive Control Tissue	Human tonsil
References	1. Marioni, G. *et al.* (2010) Neoangiogenesis in laryngeal carcinoma: angiogenin and CD105 expression is related to carcinoma recurrence rate and disease-free survival. Histopathology. 57: 535-43. 2. Marioni, G. *et al.* (2013) The role of angiogenin in pT1-T2 tongue carcinoma neo-angiogenesis and cell proliferation: an exploratory study. J Oral Pathol Med. 42: 606-11. 3. Marioni, G. *et al.* (2011) Laryngeal carcinoma prognosis after postoperative radiotherapy correlates with CD105 expression, but not with angiogenin or EGFR expression. Eur Arch Otorhinolaryngol. 268: 1779-87. 4. Seilhean, D. *et al.* (2009) Accumulation of TDP-43 and alpha-actin in an amyotrophic lateral sclerosis patient with the K17I ANG mutation. Acta Neuropathol. 118: 561-73. 5. Marioni, G. *et al.* (2014) A panel of biomarkers for predicting response to postoperative RT for laryngeal cancer? Am J Otolaryngol. pii: S0196-0709(14)00137-9. 6. Pan, S.C. *et al.* (2012) Angiogenin expression in burn blister fluid: Implications for its role in burn wound neovascularization. Wound Repair Regen. 20: 731-9. 7. Kirby, J. *et al.* (2013) Lack of unique neuropathology in amyotrophic lateral sclerosis associated with p.K54E angiogenin (ANG) mutation. Neuropathol Appl Neurobiol. 2013 Aug;39(5): 562-71. 8. Marioni, G. *et al.* (2013) Indications for postoperative radiotherapy in laryngeal carcinoma: A panel of tumor tissue markers for predicting locoregional recurrence in surgically treated carcinoma. A pilot study. Head Neck. 36: 1534-40. 9. Lovato, A. *et al.* (2015) A Higher Angiogenin Expression is Associated With a Nonnuclear Maspin Location in Laryngeal Carcinoma Clinical and Experimental Otorhinolaryngology. 8 (3): 268.
Further Reading	1. Fett, J. W. *et al.* (1985) Isolation and characterization of angiogenin, an angiogenic protein from human carcinoma cells. Biochemistry. 24: 5480-6.
Storage	Prior to reconstitution store at +4ºC. After reconstitution store at +4ºC or at -20ºC if preferred.

	Storage in frost-free freezers is not recommended.
Shelf Life	12 months from date of reconstitution.
Health And Safety Information	Material Safety Datasheet documentation available at: Material Safety Datasheet Documentation #10095 available at: https://www.bio-rad-antibodies.com/uploads/MSDS/10095.pdf
Regulatory	For research purposes only

Related Products

Recommended Secondary Antibodies

Goat Anti Mouse IgM (STAR86...)	RPE
Goat Anti Mouse IgG IgA IgM (STAR87...)	Alk. Phos., HRP
Goat Anti Mouse IgM (STAR138...)	Alk. Phos.
Human Anti Mouse IgM (HCA040...)	FITC, HRP

Recommended Negative Controls

MOUSE IgM NEGATIVE CONTROL (MCA692)

North & South America Tel: +1 800 265 7376 Fax: +1 919 878 3751 Email: antibody_sales_us@bio-rad.com

Worldwide Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Email: antibody_sales_uk@bio-rad.com

Europe Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 Email: antibody_sales_de@bio-rad.com

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