

Datasheet: 0555-5008

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

Product Details

	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 <u>www.bio-rad-antibodies.com/protocols</u> .					
	Flow Cytometry	Yes	No	Not Determined	Suggested Dilution	
	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 <u>Marioni et al. 2011</u>					
Target Species	Human					

Product Form	Tissue Culture Supernatant - lyophilized			
Reconstitution	500 µl sterile deionised water			
Buffer Solution	Phosphate buffered saline			
Preservative Stabilisers	0.01% Thiomersal 1% Bovine Serum Albumin			

Approx. Protein Concentrations	IgM concentration 0.3 mg/ml
Immunogen	Recombinant human angiogenin.
External Database Links	UniProt: P03950 Related reagents Entrez Gene: 283 ANG Related reagents
Synonyms	RNASE5
RRID	AB_2274027
Specificity	Mouse anti Human angiogenin antibody, 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 <u>Gao et al.2008</u>) 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 <u>RNH1</u> (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	 Marioni, G. <i>et al.</i> (2010) Neoangiogenesis in laryngeal carcinoma: angiogenin and CD105 expression is related to carcinoma recurrence rate and disease-free survival. <u>Histopathology. 57: 535-43.</u> Marioni, G. <i>et al.</i> (2013) The role of angiogenin in pT1-T2 tongue carcinoma neo-angiogenesis and cell proliferation: an exploratory study. <u>J Oral Pathol Med. 42:</u> <u>606-11.</u> Marioni, G. <i>et al.</i> (2011) Laryngeal carcinoma prognosis after postoperative radiotherapy correlates with CD105 expression, but not with angiogenin or EGFR expression. <u>Eur Arch Otorhinolaryngol. 268: 1779-87.</u> Seilhean, D. <i>et al.</i> (2009) Accumulation of TDP-43 and alpha-actin in an amyotrophic lateral sclerosis patient with the K17I ANG mutation. <u>Acta Neuropathol. 118: 561-73.</u> Marioni, G. <i>et al.</i> (2014) A panel of biomarkers for predicting response to postoperative RT for laryngeal cancer? <u>Am J Otolaryngol. pii: S0196-0709(14)00137-9.</u> Pan, S.C. <i>et al.</i> (2012) Angiogenin expression in burn blister fluid: Implications for its role in burn wound neovascularization. <u>Wound Repair Regen. 20: 731-9.</u>

	 7. Kirby, J. <i>et al.</i> (2013) Lack of unique neuropathology in amyotrophic lateral sclerosis associated with p.K54E angiogenin (ANG) mutation. <u>Neuropathol Appl Neurobiol. 2013</u> <u>Aug;39(5): 562-71.</u> 8. Marioni, G. <i>et al.</i> (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. <u>Head Neck. 36: 1534-40.</u> 9. Lovato, A. <i>et al.</i> (2015) A Higher Angiogenin Expression is Associated With a Nonnuclear Maspin Location in Laryngeal Carcinoma <u>Clinical and Experimental Otorhinolaryngology. 8 (3): 268.</u>
Further Reading	1. Fett, J. W. <i>et al</i> . (1985) Isolation and characterization of angiogenin, an angiogenic protein from human carcinoma cells. <u>Biochemistry. 24: 5480-6.</u>
Storage	This product is shipped at ambient temperature. Prior to reconstitution store at +4°C. After reconstitution it is recommended to aliquot the sample as needed. Keep aliquots at 2-8°C for short term use (up to 4 weeks) and store the remaining aliquots at -20°C. Avoid repeated freezing and thawing as this may denature the antibody. Storage in frost-free freezers is not recommended.
Guarantee	12 months from date of despatch
Health And Safety Information	Material Safety Datasheet documentation #10512 available at: 10512: <u>https://www.bio-rad-antibodies.com/uploads/MSDS/10512.pdf</u>
Regulatory	For research purposes only

Related Products

Recommended Secondary Antibodies

Goat Anti Mouse IgM (STAR138)	<u>Alk. Phos.</u>
Human Anti Mouse IgM (HCA040)	<u>FITC</u>
Goat Anti Mouse IgG IgA IgM (STAR87)	Alk. Phos., HRP

Recommended Negative Controls

MOUSE IgM NEGATIVE CONTROL (MCA692)

North & South	Tel: +1 800 265 7376	Worldwide	Tel: +44 (0)1865 852 700	Europe	Tel: +49 (0) 89 8090 95 21
America	Fax: +1 919 878 3751		Fax: +44 (0)1865 852 739		Fax: +49 (0) 89 8090 95 50
	Email: antibody_sales_us@bio-ra	id.com	Email: antibody_sales_uk@bio-rad.com		Email: antibody_sales_de@bio-rad.com
To find a b	atch/lot specific datasheet	for this produc	ct, please use our online se 'M391337:211008'	arch tool at:	bio-rad-antibodies.com/datasheets

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