Muscle Specific Actin Monoclonal Mouse Antibody (MSA/953)



Product Description

This antibody recognizes actin of skeletal, cardiac, and smooth muscle cells. It is not reactive with other mesenchymal cells except for myoepithelium. Actin can be resolved on the basis of its isoelectric points into three distinctive components: alpha, beta, and gamma in order of increasing isoelectric point. Anti-muscle specific actin recognizes alpha and gamma isotypes of all muscle groups. Non-muscle cells such as vascular endothelial cells and connective tissues are non-reactive. Also, neoplastic cells of non-muscle-derived tissue such as carcinomas, melanomas, and lymphomas are negative. It stains tumors of smooth muscle (leiomyomas and leiomyosarcomas) as well as skeletal muscle (rhabdomyomas and rhabdomyosarcomas).

Primary antibodies are available purified, or with a selection of fluorescent CF® dyes and other labels. CF® dyes offer exceptional brightness and photostability. See the CF® Dye Brochure for more information. Note: Conjugates of blue fluorescent dyes like CF®405S and CF®405M are not recommended for detecting low abundance targets, because blue dyes have lower fluorescence and can give higher non-specific background than other dye colors.

Stock status: Because Biotium offers a large number of antibody and conjugation options, primary antibody conjugates may be made to order. Typical lead times are up to one week for CF® dye and biotin conjugates, and up to 2-3 weeks for fluorescent protein and enzyme conjugates. Please email order@biotium.com to inquire about stock status and lead times before placing your order.

Catalog number key for antibody number 0953, Anti-Muscle Specific Actin (MSA/953)

Product attributes

Call us: 800-304-5357

Antibody number	#0953			
Antibody reactivity (target)	Muscle Specific Actin			
Antibody type	Primary			
Host species	Mouse			
Clonality	Monoclonal			
Clone	MSA/953			
Isotype	IgG1, kappa			
Molecular weight	Multiple			
Synonyms	ACTA, ACTA1, ACTA2, ACTC1, Actin, ACTSA, Alpha-2 actin, alpha skeletal muscle, Alpha-actin-1, Cardiac muscle alpha actin-1, Skeletal muscle alpha actin-1			
Entrez gene ID	58, 59 & 70			
SwissProt	P62736, P68032 & P68133			
Unigene	118127, 1288 & 500483			
Immunogen	Synthetic peptide common among human muscle actins			
Antibody target cellular	Cytoskeleton			
localization Verified antibody applications	IHC (FFPE) (verified), WB (verified)			
Species reactivity	Human, Rabbit, Rat			
Antibody application notes	Higher concentration may be required for direct detection using primary antibody conjugates than for indirect detection with secondary antibody, Immunofluorescence: 0.5-1 ug/mL, Immunohistology formalin-fixed 0.25-0.5 ug/mL, Staining of formalin-fixed tissues requires boiling tissue sections in 10 mM			

Email: btinfo@biotium.com

Positive control	Muscle or sarcoma		
Shipping condition	Room temperature		
Storage Conditions	Store at 2 to 8 °C, Protect fluorescent conjugates from light, Note: store BSA-free antibodies at -10 to -35 °C		
Shelf life	Guaranteed for at least 24 months from date of receipt when stored as recommended		
Regulatory status	For research use only (RUO)		
Antibody/conjugate formulation	Conjugates: 0.1 mg/mL in PBS/0.1% BSA/0.05% azide, HRP conjugates: 0.1 mg/mL in PBS/0.05% BSA, Purified: 0.2 mg/mL in PBS/0.05% BSA/0.05% azide, Purified, BSA-free: 1 mg/mL in PBS without azide		
Antibody research areas	Cytoskeleton		
Cell/tissue expression	Muscle		
Tumor expression	Sarcoma		

citrate buffer, pH 6.0, for 10-20 minutes, flow Cytometry 0.5-1 ug/million cells/0.1 mL, Western blotting 0.5-1.0 ug/ml. Optimal dilution for a specific application should be determined by user

Antibody # prefix	Conjugation	Ex/Em (nm)	Laser line	Detection channel	Dye Features
BNC04	CF®405S	404/431	405	DAPI (microscopy), AF405	CF®405S Features
BNC88	CF®488A	490/515	488	GFP, FITC	CF®488A Features
BNC68	CF®568	562/583	532, 561	RFP, TRITC	CF®568 Features
BNC94	CF®594	593/614	561	Texas Red®	CF®594 Features
BNC40	CF®640R	642/662	633-640	Cy®5	CF®640R Features
BNC47	CF®647	650/665	633-640	Cy®5	CF®647 Features
BNCB	Biotin	N/A	N/A	N/A	
BNUB	Purified	N/A	N/A	N/A	
BNUM	Purified,	N/A	N/A	N/A	

Alexa Fluor, Pacific Blue, Pacific Orange, and Texas Red are trademarks or registered trademarks of Thermo Fisher Scientific; Cy is a registered trademark of Cytiva; IRDye, LI-COR, of LI-COR Bioscience.