



Mouse monoclonal antibody to alpha actin (smooth muscle) [1A4]: IgG

Catalogue No.:	M-996-100
Description:	Actins are highly conserved proteins ubiquitously expressed in all eukaryotic cells. Three main groups of actin isoforms have been identified in vertebrates; alpha, beta and gamma. Alpha actins are found mainly in muscle tissues.
Batch No.:	See product label
Unit size:	100 ug
Antigen:	A synthetic peptide of 10 amino acids corresponding to the N-terminus of alpha smooth muscle actin. This antibody reacts only with alpha smooth muscle actin and does not react with actin from striated muscle (alpha-sarcomeric) and myocardium (alpha-myocardial). It also does not react with beta and gamma actins.
Clone:	1A4
Other Names:	ACTA2; ACTSA; ACTVS;
Accession:	P62736 ACTA_HUMAN
Produced in:	Mouse
Purity:	IgG
Applications:	Immunohistochemistry (IHC) and Western Blotting (WB). A concentration of 2.0 ug/mL is recommended for WB. Human smooth muscle actin has a predicted length of 377 residues and a MW of 42 kDa. A concentration of 0.1-0.5 ug/mL is recommended to detect alpha smooth muscle actin in formalin fixed and paraffin embedded tissues as well as formalin/acetone fixed tissues. Biosensis recommends optimal dilutions/concentrations should be determined by the end user.
Specificity:	The specificity of this antibody has been confirmed by WB and IHC against the antigen.
Cross-reactivity:	Human; mouse; rat;
Form:	Lyophilized from 1.2% sodium acetate, 2mg BSA, 0.01mg NaN3
Reconstitution:	Reconstitute in 1 mL of PBS to achieve an antibody concentration of 100 ug/mL. Centrifuge to remove any insoluble material.
Storage:	At least 12 months after purchase at 2-8C (lyophilized formulations). After reconstitution, aliquot and store at -20C for a higher stability. Avoid freeze-thaw cycles.
Expiry Date:	12 months after purchase.
Specific References:	1. Pogribny IP et al (2013) Strain-dependent dysregulation of one-carbon metabolism in male mice is associated with choline- and folate-deficient diet-induced liver injury. FASEB J. 2013 Jun;27(6):2233-43. 2. Sebastiani G et al (2011) Accelerated CCl4-induced liver fibrosis in H ₂ Y ^{-/-} mice, associated with an oxidative burst and precocious profibrogenic gene expression. PLoS One. 2011;6(9):e25138.

FOR RESEARCH USE ONLY



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