Product datasheet

anti-alpha-Smooth Muscle Actin mouse monoclonal, 1A4/ASM-1, prediluted, purified

Short overview

Cat. No.	65001
Quantity	5 ml

Product description

Host	Mouse
Antibody Type	Monoclonal
Isotype	IgG2a
Clone	1A4/ASM-1
Immunogen	Synthetic N-terminus decapeptide of alpha-smooth-muscle isoform of actin
Formulation	PBS pH 7.4 with 0.5% BSA and 0.09% sodium azide
UniprotID	P62739 (Bovine),P08023 (Chicken),P62736 (Human),P62737 (Mouse),P62738 (Rat)
Synomym	Actin, aortic smooth muscle, Alpha-actin-2, Cell growth-inhibiting gene 46 protein [Cleaved into: Actin, aortic smooth muscle, intermediate form], ACTA2, ACTSA, ACTVS, GIG46
Conjugate	Unconjugated
Purification	Affinity chromatography
Storage	Short term at 2-8°C; long term storage in aliquots at -20°C; avoid freeze/thaw cycles
Intended use	Research use only
Application	ICC/IF, IHC, WB
Reactivity	Bovine, Chicken, Horse, Human, Mouse, Rat

Applications

Immunocytochemistry (ICC)	Assay dependent
Immunohistochemistry (IHC) - frozen	Ready-to-use
Immunohistochemistry (IHC) - paraffin	Ready-to-use (protease treatment and/or microwave treatment recommended)
Western Blot (WB)	Assay dependent

Background

1A4/ASM-1 represents an excellent marker for myogenic soft tissue tumors and smooth muscle differentiation. Polypeptide reacting: specific for alpha-smooth-muscle isoform of actin (43 kDa). Tumors specificallly detected: leiomyosarcoma, leiomyoma, certain stromal cells surrounding infiltrating ductal carcinoma of breast. Tested cultured cell lines: Stress fibers of smooth muscle-derived cells and some smooth muscle subtype fibroblasts

Product images



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References

Publication	Species	Application
Domke, L and Franke, W. The cell-cell junctions of mammalian testes.., Cell Tissue Res, 375, 451-482, (2019)	bovine	ICC-IF
Skalli, O. et al. A Monoclonal Antibody against a-Smooth Muscle Actin: A New Probe for Smooth Muscle Differentiation. J. Cell Biol. 103, 2787-2796 (1986).	human,rat,bovine,chicken	WB,IHC (frozen)
Steiniger, B. et al. Capillary networks and follicular marginal zones in human spleens. Three-dimensional models based on immunostained serial sections. PLoS.One. 13, e0191019 (2018).	human	IHC (paraffin)
Hempel, F. et al. Depletion of Bone Marrow-Derived Fibrocytes Attenuates TAA-Induced Liver Fibrosis in Mice. Cells. 8, (2019)	mouse	WB,IHC (paraffin)
Buniatian, G. et al. Antifibrotic Effects of Amyloid-Beta and Its Loss in Cirrhotic Liver. Cells. 9, (2020)	mouse	IHC-IF,IHC (paraffin)