

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) |
| Synonym | 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 specifically 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



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

References

| Publication | Species | Application |
|--|--------------|-----------------------------|
| Poosti, F. et al. Inhibition of renal fibrosis with a human CXCL9-derived glycosaminoglycan-binding peptide. Clin. Transl. Immunol. 11, 1â€“18 (2022). | Human, Mouse | ICC-IF, IHC-P-IF |
| Jiang, D. et al. MSCs rescue impaired wound healing in a murine LAD1 model by adaptive responses to low TGF-Î²1 levels. EMBO.Rep. 21, e49115 (2020) | human,mouse | WB,IHC-IF (paraffin),ICC-IF |
| Schwinghammer, U. et al. Î±2-Adrenergic Receptor in Liver Fibrosis: Implications for the Adrenoblocker Mesedin. Cells. 9, (2020) | human | IHC-IF,ICC-IF |
| Buniatian, G. et al. Antifibrotic Effects of Amyloid-Beta and Its Loss in Cirrhotic Liver. Cells. 9, (2020) | mouse | IHC-IF,IHC (paraffin) |
| Munir, S. et al. TLR4-dependent shaping of the wound site by MSCs accelerates wound healing. EMBO Rep. 21, e48777(2020). | mouse | IHC (frozen)/IF |