

DESCRIPTION

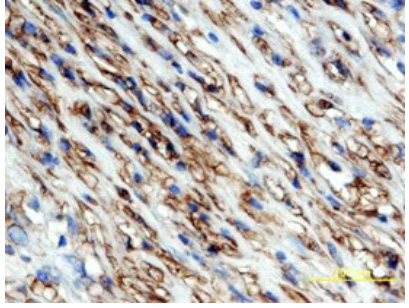
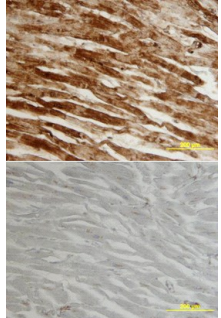
Species Reactivity	Human
Specificity	Detects human α -Smooth Muscle Actin.
Source	Monoclonal Mouse IgG _{2A} Clone # 1A4
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	α -Smooth Muscle Actin N-terminal Synthetic Decapeptide
Formulation	Lyophilized from a 0.2 μ m filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 μ m filtered solution in PBS.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

	Recommended Concentration	Sample
Immunohistochemistry	8-25 μ g/mL	See Below
Intracellular Staining by Flow Cytometry	2.5 μ g/10 ⁶ cells	Human peripheral blood mononuclear cells fixed with paraformaldehyde and permeabilized with saponin
Immunocytochemistry	Kivela, T. <i>et al.</i> (1992) <i>Histochem. Cytochem.</i> 40 :1517. Roholl, P.J. <i>et al.</i> (1990) <i>Hum. Pathol.</i> 21 :1269.	

DATA

Immunohistochemistry	Immunohistochemistry
 <p>α-Smooth Muscle Actin in Human Breast Cancer Tissue. α-Smooth Muscle Actin was detected in immersion fixed paraffin-embedded sections of human breast cancer tissue using Mouse Anti-Human α-Smooth Muscle Actin N-terminal Synthetic Decapeptide Monoclonal Antibody (Catalog # MAB1420) at 8 μg/mL overnight at 4 °C. Tissue was stained using the Anti-Mouse HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # CTS002) and counterstained with hematoxylin (blue). View our protocol for Chromogenic IHC Staining of Paraffin-embedded Tissue Sections.</p>	 <p>α-Smooth Muscle Actin in Human Heart. α-Smooth Muscle Actin was detected in immersion fixed paraffin-embedded sections of human heart using Mouse Anti-Human α-Smooth Muscle Actin N-terminal Synthetic Decapeptide Monoclonal Antibody (Catalog # MAB1420) at 25 μg/mL overnight at 4 °C. Tissue was stained using the Anti-Mouse HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # CTS002) and counterstained with hematoxylin (blue). Lower panel shows a lack of labeling if primary antibodies are omitted and tissue is stained only with secondary antibody followed by incubation with detection reagents. View our protocol for Chromogenic IHC Staining of Paraffin-embedded Tissue Sections.</p>

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.5 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

α -Smooth Muscle Actin has been frequently used as a marker of smooth muscle differentiation (1, 2).

References:

1. Skalli, O. *et al.* (1986) *J. Cell Biol.* **103**:2787.
2. Oishi, K. *et al.* (2002) *J. Physiol.* **540**:139.