

# Product Datasheet

## alpha-Smooth Muscle Actin Antibody (1A4) NBP1-97722

Unit Size: 0.05 mg

Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.

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**NBP1-97722**

alpha-Smooth Muscle Actin Antibody (1A4)

<b>Product Information</b>	
<b>Unit Size</b>	0.05 mg
<b>Concentration</b>	1 mg/ml
<b>Storage</b>	Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.
<b>Clonality</b>	Monoclonal
<b>Clone</b>	1A4
<b>Preservative</b>	0.09% Sodium Azide
<b>Isotype</b>	IgG2a
<b>Purity</b>	Protein A or G purified
<b>Buffer</b>	PBS
<b>Product Description</b>	
<b>Host</b>	Mouse
<b>Gene ID</b>	59
<b>Gene Symbol</b>	ACTA2
<b>Species</b>	Human, Mouse, Rat, Chicken, Goat, Mammal, Rabbit
<b>Reactivity Notes</b>	Protochordates, lower craniates, mammals including Sheep, Swine, Rat, Chicken, Goat, Rabbit, Mouse and Monkey
<b>Marker</b>	Mesenchymal Cell Marker
<b>Specificity/Sensitivity</b>	alpha-SM1 reacts exclusively with alpha-smooth muscle actin which is typical for vascular and visceral smooth muscle cells, but which is also present in myofibroblasts.
<b>Immunogen</b>	This is a mouse monoclonal IgG2a antibody derived by fusion of Sp2/0 mouse myeloma cells with spleen cells from a BALB/c mouse immunized with a peptide comprising the first 10 amino acids of alpha-smooth muscle actin with an acetylated N-terminus coupled to keyhole limpet hemocyanin via the C-terminal cysteine (Ac-EEEDSTALVC).
<b>Product Application Details</b>	
<b>Applications</b>	Western Blot, ELISA, Immunocytochemistry/ Immunofluorescence, Immunohistochemistry, Immunohistochemistry-Frozen, Immunohistochemistry-Paraffin
<b>Recommended Dilutions</b>	Western Blot 1:10000-1:50000, ELISA 1:100-1:2000, Immunohistochemistry 1:10-1:500, Immunocytochemistry/ Immunofluorescence 1:10-1:500, Immunohistochemistry-Paraffin 1:1000-1:10000, Immunohistochemistry-Frozen 1:1000-1:10000
<b>Application Notes</b>	Optimal antibody dilution should be determined by titration; recommended range is 1:1000 - 1:10000 for Immunohistochemistry with avidin-biotinylated horseradish peroxidase complex (ABC) as detection reagent. Although not tested this antibody may work in immuno-electron microscopy

## Publications

Yang L, Han B, Zhang M et Al. Activation of BK Channels Prevents Hepatic Stellate Cell Activation and Liver Fibrosis Through the Suppression of TGF beta 1/SMAD3 and JAK/STAT3 Profibrotic Signaling Pathways Front Pharmacol 2020-03-06 [PMID: 32210801] (WB, Rat)

Yamashita A, Zhao Y, Matsuura Y et al. Increased metabolite levels of glycolysis and pentose phosphate pathway in rabbit atherosclerotic arteries and hypoxic macrophage. PLoS ONE 2014-01-27 [PMID: 24466087] (IHC-P, Rabbit)



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### Limitations

This product is for research use only and is not approved for use in humans or in clinical diagnosis. Primary Antibodies are guaranteed for 1 year from date of receipt.

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