

# Product Datasheet

## alpha-Smooth Muscle Actin Antibody (1A4/asm-1) [PE] NBP2-34522PE

Unit Size: 0.1 ml

Store at 4C in the dark.

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**NBP2-34522PE**

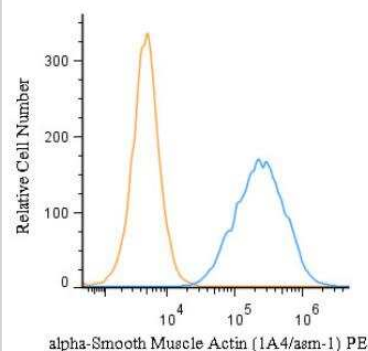
alpha-Smooth Muscle Actin Antibody (1A4/asm-1) [PE]

Product Information	
Unit Size	0.1 ml
Concentration	Please see the vial label for concentration. If unlisted please contact technical services.
Storage	Store at 4C in the dark.
Clonality	Monoclonal
Clone	1A4/asm-1
Preservative	0.05% Sodium Azide
Isotype	IgG2a Kappa
Conjugate	PE
Purity	Protein A purified
Buffer	PBS
Target Molecular Weight	42 kDa
Product Description	
Host	Mouse
Gene ID	59
Gene Symbol	ACTA2
Species	Human, Mouse, Rat, Porcine, Bovine, Canine, Chicken, Feline, Guinea Pig, Goat, Monkey, Baboon, Rabbit, Sheep
Reactivity Notes	Feline reactivity reported from a verified customer review.
Marker	Leiomyosarcoma Marker
Specificity/Sensitivity	Actin is a major component of the cytoskeleton and is present in most cell types. This MAb is highly specific to actin from smooth muscles. Its epitope lies in the first four N-terminal amino acids. This MAb does not stain cardiac or skeletal muscle; however, it does stain myofibroblasts and myoepithelial cells. This antibody could be used together with anti-muscle specific actin and myogenin in making a diagnosis of smooth muscle and skeletal muscle tumors. In most cases of rhabdomyosarcoma, this antibody yields negative results whereas anti-muscle specific actin and myogenin are positive. Leiomyosarcomas are positive only with anti-muscle specific actin and anti-smooth muscle actin and are negative with anti-myogenin.
Immunogen	Alpha-Smooth Muscle Actin Antibody (1A4/asm-1) is made to the N-Terminal decapeptide of Alpha smooth muscle isoform of actin and conjugated to KLH.
Product Application Details	
Applications	Western Blot, Simple Western, ELISA, Flow Cytometry, Flow (Intracellular), Immunocytochemistry/ Immunofluorescence, Immunohistochemistry, Immunohistochemistry-Frozen, Immunohistochemistry-Paraffin, Immunoprecipitation, CyTOF-ready
Recommended Dilutions	Western Blot, Simple Western, Flow Cytometry, ELISA, Immunohistochemistry, Immunocytochemistry/ Immunofluorescence, Immunoprecipitation, Immunohistochemistry-Paraffin, Immunohistochemistry-Frozen, Flow (Intracellular), CyTOF-ready
Application Notes	Optimal dilution of this antibody should be experimentally determined.

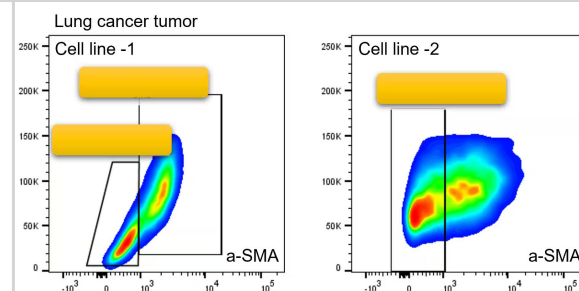


## Images

An intracellular stain was performed on HeLa cells with alpha-Smooth Muscle Actin Antibody (1A4/asm-1) NBP2-34522PE (blue) and a matched isotype control (orange). Cells were fixed with 4% PFA and then permeabilized with 0.1% saponin. Cells were incubated in an antibody dilution of 2.5 ug/mL for 30 minutes at room temperature. Both antibodies were conjugated to phycoerythrin.



Flow Cytometry: alpha-Smooth Muscle Actin Antibody (1A4/asm-1) - BSA Free [NBP2-33006] - Analysis of alpha-Smooth Muscle Actin Antibody (1A4/asm-1) [Alexa Fluor® 647] (Catalog Number: NBP2-34522AF647) using two lung cancer cell lines to acquire the subcutaneous tumors. MMT status of macrophages was then analyzed. Image from a verified customer review.



## Publications

Ming Yang, Xiaoqiang Qi, Nan Li, Jussuf T. Kaifi, Shiyu Chen, Andrew A. Wheeler, Eric T. Kimchi, Aaron C. Ericsson, R. Scott Rector, Kevin F. Staveley-O'Carroll, Guangfu Li Western diet contributes to the pathogenesis of non-alcoholic steatohepatitis in male mice via remodeling gut microbiota and increasing production of 2-oleoylglycerol Nature Communications 2023-01-16 [PMID: 36646715]

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**Products Related to NBP2-34522PE**

NBP1-96981PE	Mouse IgG2a Kappa Isotype Control (M2AK) [PE]
H00000059-P01-10ug	Recombinant Human alpha-Smooth Muscle Actin GST (N-Term) Protein
DVE00	VEGF [HRP]
NBP2-66429	Mouse alpha-Smooth Muscle Actin ELISA Kit (Colorimetric)

**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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