

# Product Datasheet

## **alpha-Smooth Muscle Actin Antibody (1A4/asm-1) [Alexa Fluor® 488] NBP2-34522AF488**

Unit Size: 0.1 ml

Store at 4C in the dark.

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**NBP2-34522AF488**

alpha-Smooth Muscle Actin Antibody (1A4/asm-1) [Alexa Fluor® 488]

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	Alexa Fluor 488
Purity	Protein A purified
Buffer	50mM Sodium Borate
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, Baboon, Monkey, 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.

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## Product Application Details

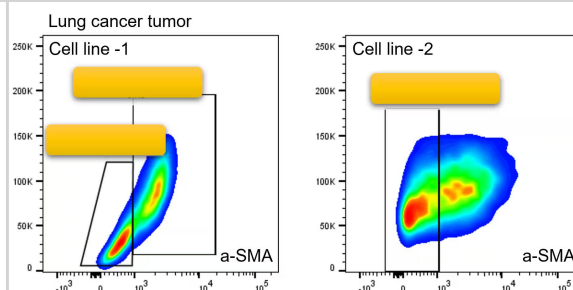
<b>Applications</b>	Western Blot, Simple Western, ELISA, Flow Cytometry, Flow (Intracellular), Immunocytochemistry/ Immunofluorescence, Immunohistochemistry, Immunohistochemistry-Frozen, Immunohistochemistry-Paraffin, Immunoprecipitation, CyTOF-ready
<b>Recommended Dilutions</b>	Western Blot, Simple Western, Flow Cytometry, ELISA, Immunohistochemistry, Immunocytochemistry/ Immunofluorescence, Immunoprecipitation, Immunohistochemistry-Paraffin, Immunohistochemistry-Frozen, Flow (Intracellular), CyTOF-ready
<b>Application Notes</b>	Optimal dilution of this antibody should be experimentally determined.

## Images

Product Image: alpha-Smooth Muscle Actin Antibody (1A4/asm-1) [Alexa Fluor® 488] [NBP2-34522AF488] - Vial of Alexa Fluor 488 conjugated antibody. Alexa Fluor 488 is optimally excited at 490 nm by the Blue laser (488 nm) and has an emission maximum of 525 nm.



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

Lim AY, Kato Y, Sakolish C et al. Reproducibility and Robustness of a Liver Microphysiological System PhysioMimix LC12 under Varying Culture Conditions and Cell Type Combinations Bioengineering (Basel, Switzerland) 2023-10-14 [PMID: 37892925] (FLOW, Human)

Tan T, Hu H, Wang H et al Bioinspired lipoproteins-mediated photothermia remodels tumor stroma to improve cancer cell accessibility of second nanoparticles. Nat Commun. 2019-07-25 [PMID: 31346166] (FLOW, Mouse)

Details:

Citation using the Alexa Fluor 488 version of this antibody.





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### **Products Related to NBP2-34522AF488**

NBP1-96981AF488	Mouse IgG2a Kappa Isotype Control (M2AK) [Alexa Fluor® 488]
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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