

# Product Datasheet

## alpha Tubulin Antibody (DM1A) - Azide and BSA Free NBP2-80570

Unit Size: 0.1 ml

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

[www.novusbio.com](http://www.novusbio.com)



[technical@novusbio.com](mailto:technical@novusbio.com)

Protocols, Publications, Related Products, Reviews, Research Tools and Images at:  
[www.novusbio.com/NBP2-80570](http://www.novusbio.com/NBP2-80570)

Updated 9/11/2024 v.20.1

Earn rewards for product  
reviews and publications.

Submit a publication at [www.novusbio.com/publications](http://www.novusbio.com/publications)

Submit a review at [www.novusbio.com/reviews/destination/NBP2-80570](http://www.novusbio.com/reviews/destination/NBP2-80570)



**NBP2-80570**

alpha Tubulin Antibody (DM1A) - Azide and BSA Free

<b>Product Information</b>	
<b>Unit Size</b>	0.1 ml
<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>	DM1A
<b>Preservative</b>	No Preservative
<b>Isotype</b>	IgG1 Kappa
<b>Purity</b>	Protein G purified
<b>Buffer</b>	PBS
<b>Target Molecular Weight</b>	50 kDa
<b>Product Description</b>	
<b>Description</b>	As the TUBA1A gene is conserved evolutionarily and is ubiquitously expressed in most eukaryotic cell lines, the Alpha tubulin antibody has been shown to be an attractive and effective choice for a loading control, detecting at approximately 50 -55 kDa. Quantitative western blotting requires a loading control in order to account and adjust for the differences in the loading of samples across wells.
<b>Host</b>	Mouse
<b>Gene ID</b>	7846
<b>Gene Symbol</b>	TUBA1A
<b>Species</b>	Human, Mouse, Rat, Porcine, Avian, Bovine, Canine, Chicken, Chinese Hamster, Drosophila, Fungi, Guinea Pig, Goat, Hamster, Parasite, Monkey, Primate, Rabbit, Xenopus, Yeast
<b>Reactivity Notes</b>	Yeast reactivity reported in scientific literature (PMID: 25126732). Will likely react with all mammals.
<b>Immunogen</b>	This alpha Tubulin Antibody (DM1A) - Azide and BSA Free was developed against native chicken brain microtubules.
<b>Product Application Details</b>	
<b>Applications</b>	Western Blot, Simple Western, Flow Cytometry, Flow (Intracellular), Immunocytochemistry/ Immunofluorescence, Immunohistochemistry, Immunohistochemistry-Frozen, Immunohistochemistry-Paraffin, Immunomicroscopy, Immunoprecipitation, CyTOF-ready
<b>Recommended Dilutions</b>	Western Blot 1:5000, Simple Western 1:50, Flow Cytometry 1 ug per million cells, Immunohistochemistry, Immunocytochemistry/ Immunofluorescence 1:50000-1:100000, Immunoprecipitation 1:50-1:100, Immunohistochemistry-Paraffin, Immunohistochemistry-Frozen 1:100-1:500, Immunomicroscopy, Flow (Intracellular), CyTOF-ready

**Application Notes**

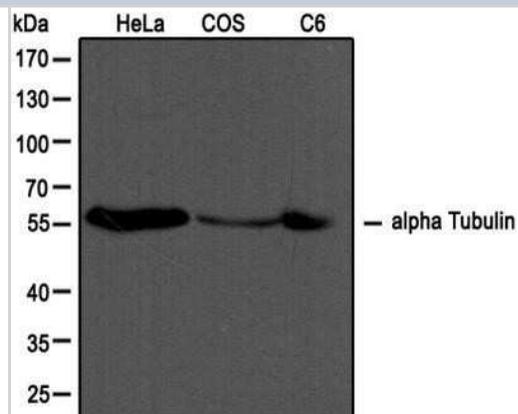
This alpha Tubulin Antibody (DM1A) is useful as a loading control for Western blot as well as Immunoprecipitation, Immunohistochemistry on paraffin-embedded and frozen sections, Immunocytochemistry/Immunofluorescence and Flow Cytometry.

The DM1A alpha tubulin antibody is ideal for use as a Western blot loading control, where a band can be seen around 50-55 kDa and as a cytoskeletal marker in ICC. For IHC-Paraffin, antigen retrieval is not essential, but may optimize staining.

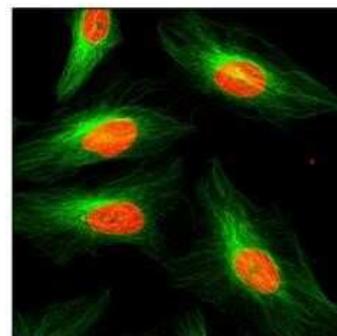
This antibody is CyTOF ready.

**Images**

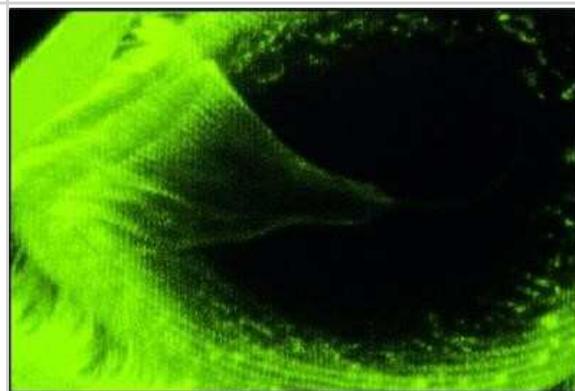
Western Blot: alpha Tubulin Antibody (DM1A) - Azide and BSA Free [NBP2-80570] - Western blot analysis of extracts from HeLa, COS and C6 cells using alpha Tubulin antibody (NB100-690, 1:1000, Alpha tubulin molecular weight: 50 kDa) Image from the standard format of this antibody.



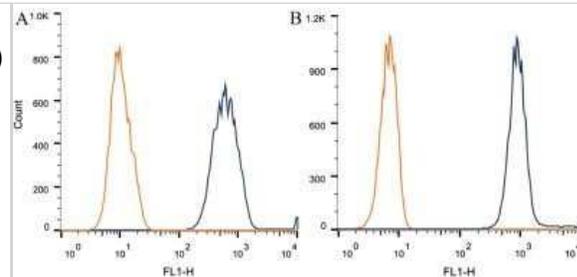
Immunocytochemistry/Immunofluorescence: alpha Tubulin Antibody (DM1A) - Azide and BSA Free [NBP2-80570] - Analysis of HeLa cells, green staining is alpha tubulin whereas red is DNA stained with propidium iodide. Image from the standard format of this antibody.



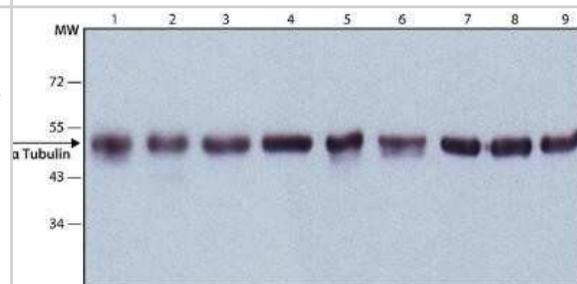
Immunohistochemistry: alpha Tubulin Antibody (DM1A) - Azide and BSA Free [NBP2-80570] - Staining of the marine parasite Cryptocaryon irritans mouth. Large bundles of microtubules form a cytophyrgeal basket. Image from the standard format of this antibody.



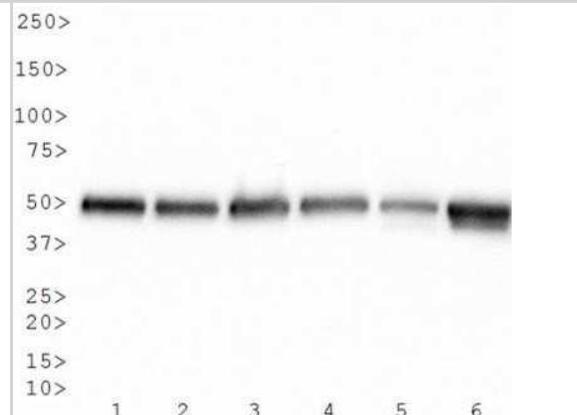
Flow Cytometry: alpha Tubulin Antibody (DM1A) - Azide and BSA Free [NBP2-80570] - Intracellular flow cytometric staining of  $1 \times 10^6$  CHO (A) and HEK-293 (B) cells using alpha Tubulin antibody (dark blue). Isotype control shown in orange. An antibody concentration of  $1 \mu\text{g}/1 \times 10^6$  cells was used. Image from the standard format of this antibody.



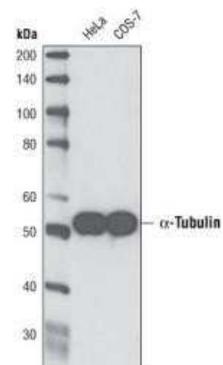
Western Blot: alpha Tubulin Antibody (DM1A) - Azide and BSA Free [NBP2-80570] - Analysis of alpha tubulin in 9 cell lysates. Lane 1. HeLa; Lane 2. JURKAT; Lane 3. COS7; Lane 4. NIH-3T3; Lane 5. PC-12; Lane 6. RAT2; Lane 7. CHO; Lane 8. MDBK; Lane 9. MDCK Image from the standard format of this antibody.



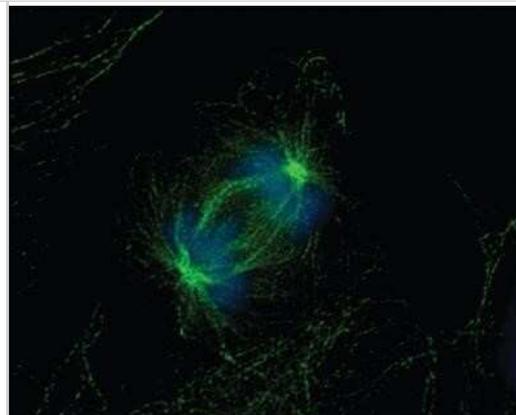
Western Blot: alpha Tubulin Antibody (DM1A) - Azide and BSA Free [NBP2-80570] - Analysis of alpha tubulin (molecular weight of 50 kDa) in 9 cell lysates. Lane 1. HeLa; Lane 2. JURKAT; Lane 3. COS7; Lane 4. NIH-3T3; Lane 5. PC-12; Lane 6. RAT2; Lane 7. CHO; Lane 8. MDBK; Lane 9. MDCK Image from the standard format of this antibody.



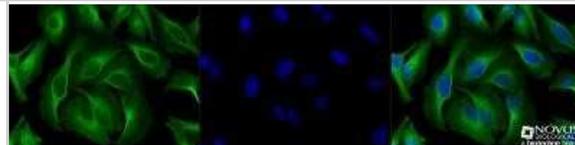
Western Blot: alpha Tubulin Antibody (DM1A) - Azide and BSA Free [NBP2-80570] - Analysis of HeLa and COS-7 lysates. Alpha tubulin molecular weight: 50 kDa. Image from the standard format of this antibody.



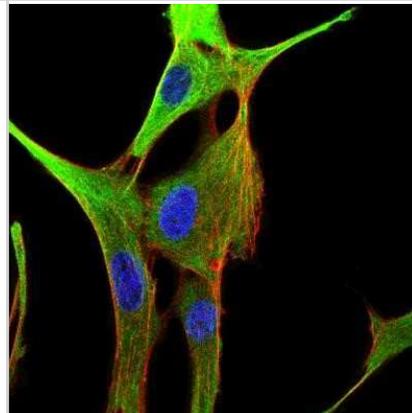
Immunocytochemistry/Immunofluorescence: alpha Tubulin Antibody (DM1A) - Azide and BSA Free [NBP2-80570] - Analysis of embryonic fibroblasts in the anaphase portion of mitosis. Image from the standard format of this antibody.



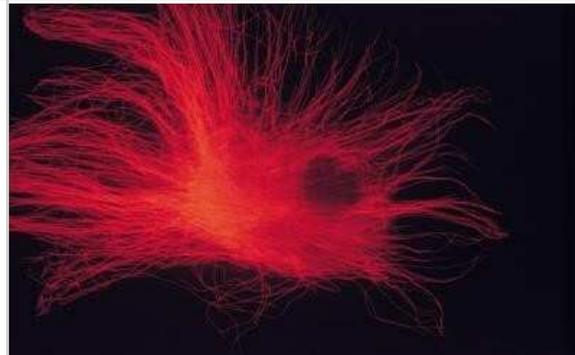
Immunocytochemistry/Immunofluorescence: alpha Tubulin Antibody (DM1A) - Azide and BSA Free [NBP2-80570] - HeLa cells were fixed for 10 minutes using 10% formalin and then permeabilized for 5 minutes using 1X TBS + 0.5% Triton-X100. The cells were incubated with anti-alpha Tubulin (DM1A) (NB100-690) at a 1:200 dilution overnight at 4C and detected with an anti-mouse Dylight 488 (Green) at a 1:500 dilution. Nuclei were counterstained with DAPI (Blue). Cells were imaged using a 40X objective. Image from the standard format of this antibody.



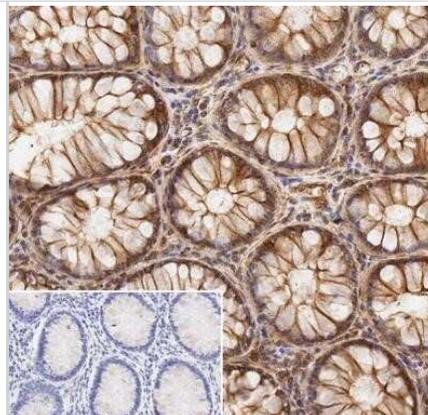
Immunocytochemistry/Immunofluorescence: alpha Tubulin Antibody (DM1A) - Azide and BSA Free [NBP2-80570] - IF Confocal analysis of C6 cells using alpha Tubulin antibody (NB100-690, 1:50). An Alexa Fluor 488-conjugated Goat to mouse IgG was used as secondary antibody (green, A). Actin filaments were labeled with Alexa Fluor 568 phalloidin (red, B). DAPI was used to stain the cell nuclei (blue, C). Image from the standard format of this antibody.



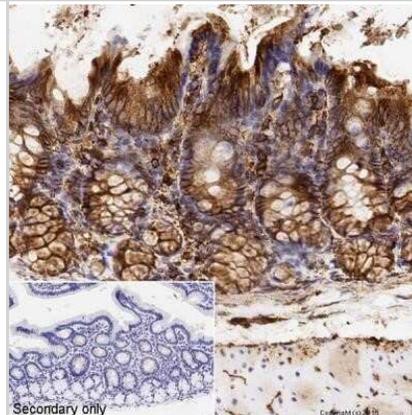
Immunocytochemistry/Immunofluorescence: alpha Tubulin Antibody (DM1A) - Azide and BSA Free [NBP2-80570] - Staining of skin fibroblasts. Image from the standard format of this antibody.



Immunohistochemistry: alpha Tubulin Antibody (DM1A) - Azide and BSA Free [NBP2-80570] - Analysis of colon tissue. Sections were formalin fixed and embedded with paraffin. Sodium citrate heat mediated antigen retrieval for 20 min. Incubated with primary antibody for 15 min at a 5 ug/ml concentration. Corner image is staining with secondary on



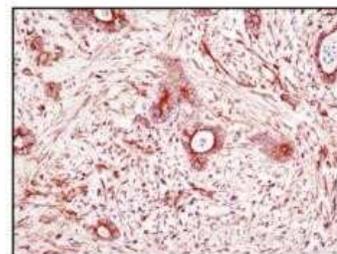
Immunohistochemistry-Paraffin: alpha Tubulin Antibody (DM1A) - Azide and BSA Free [NBP2-80570] - Analysis of formalin fixed colon sections. Heat mediated antigen retrieval was performed using sodium citrate buffer for 20 min before incubating with primary antibody at a 0.5ug/ml dilution for 15 min at RT. Image from the standard format of this antibody



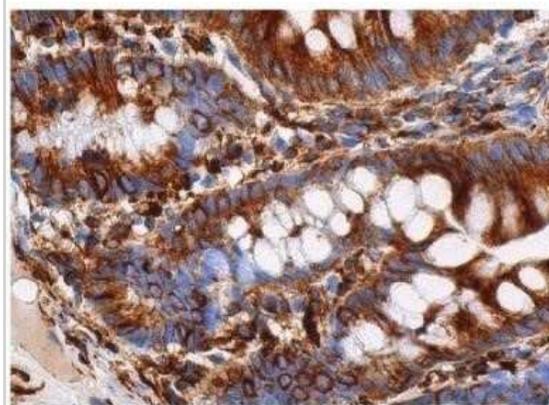
Immunohistochemistry-Paraffin: alpha Tubulin Antibody (DM1A) - Azide and BSA Free [NBP2-80570] - Analysis of formalin fixed paraffin embedded heart sections. Used at a dilution of 1:500. Image from the standard format of this antibody.



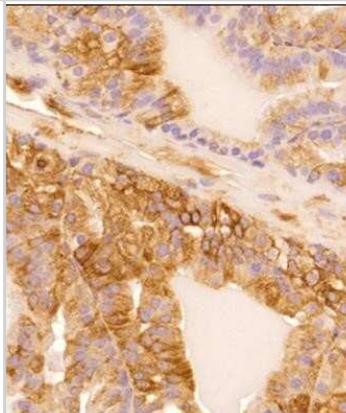
Immunohistochemistry-Paraffin: alpha Tubulin Antibody (DM1A) - Azide and BSA Free [NBP2-80570] - Analysis of paraffin embedded colon sections. Image from the standard format of this antibody.



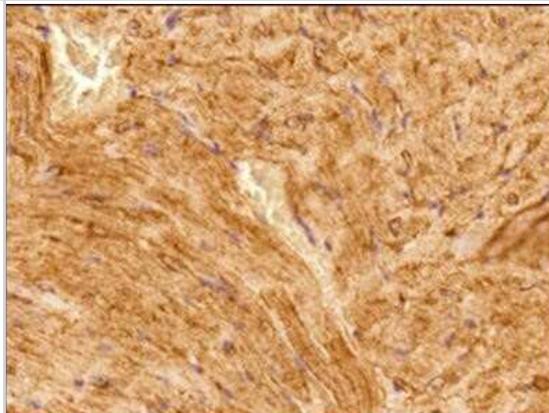
Immunohistochemistry-Paraffin: alpha Tubulin Antibody (DM1A) - Azide and BSA Free [NBP2-80570] - Analysis of small intestine tissue fixed with formalin and paraffin embedded showing cytoplasmic and cytoskeletal staining of glandular cells. Image from the standard format of this antibody.



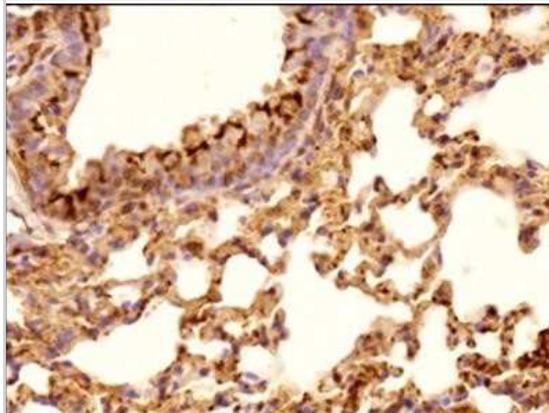
Immunohistochemistry-Paraffin: alpha Tubulin Antibody (DM1A) - Azide and BSA Free [NBP2-80570] - IHC analysis of a formalin fixed and paraffin embedded tissue section of mouse prostate using alpha Tubulin Antibody (DM1A) at 1:200 dilution. The signal was developed using HRP labelled secondary and DAB reagent which followed counterstaining with hemato



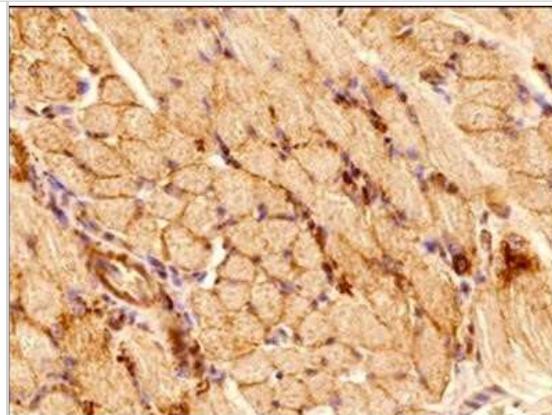
Immunohistochemistry-Paraffin: alpha Tubulin Antibody (DM1A) - Azide and BSA Free [NBP2-80570] - IHC analysis of a formalin fixed paraffin embedded tissue section of mouse heart using alpha Tubulin Antibody (DM1A) at 1:100 dilution with HRP-DAB detection and hematoxylin counterstaining. The antibody generated a strong and specific cytoplasmic signal



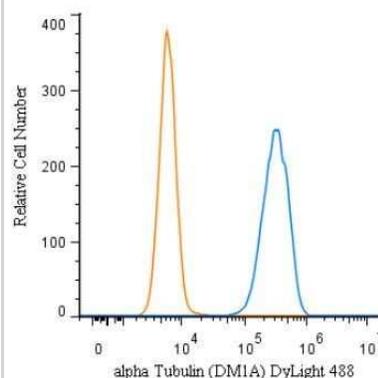
Immunohistochemistry-Paraffin: alpha Tubulin Antibody (DM1A) - Azide and BSA Free [NBP2-80570] - IHC analysis of a formalin fixed paraffin embedded tissue section of mouse lung using alpha Tubulin Antibody (DM1A) at 1:100 dilution with HRP-DAB detection and hematoxylin counterstaining. The antibody generated chunks of cytoplasmic signal in the alveol



**Immunohistochemistry-Paraffin: alpha Tubulin Antibody (DM1A) - Azide and BSA Free [NBP2-80570] - IHC analysis of a formalin fixed paraffin embedded tissue section of mouse skeletal muscle using alpha Tubulin Antibody (DM1A) at 1:100 dilution with HRP-DAB detection and hematoxylin counterstaining. The antibody generated a strong cytoplasmic signal in**

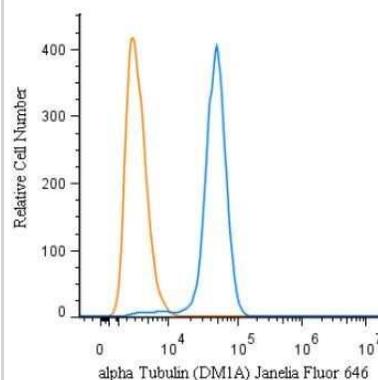


**Flow Cytometry: alpha Tubulin Antibody (DM1A) - Azide and BSA Free [NBP2-80570] - An intracellular stain was performed on HeLa cells with alpha Tubulin (DM1A) Antibody NB100-690G (blue) and a matched isotype control (orange). Cells were fixed with 4% PFA and then permeabilized with 0.1% saponin. Cells were incubated in an antibody dilution of 5 ug/mL for 30 minutes at room temperature. Both antibodies were directly conjugated to DyLight 488.**



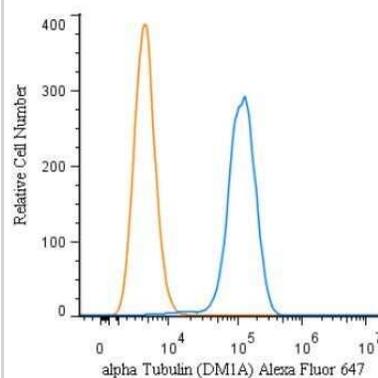
Copyright © 2019 Novus Biologicals

**Flow Cytometry: alpha Tubulin Antibody (DM1A) - Azide and BSA Free [NBP2-80570] - An intracellular stain was performed on HeLa cells with alpha Tubulin (DM1A) Antibody NB100-690JF646 (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 directly conjugated to Janelia Fluor 646.**



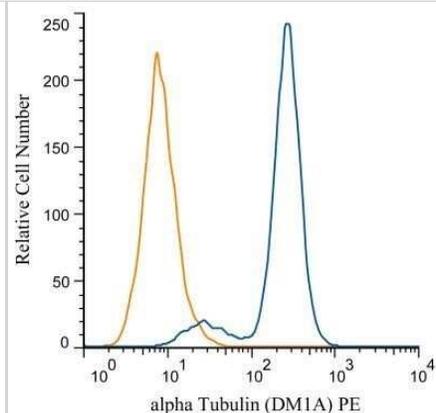
Copyright © 2020 Novus Biologicals

**Flow Cytometry: alpha Tubulin Antibody (DM1A) - Azide and BSA Free [NBP2-80570] - An intracellular stain was performed on HeLa cells with alpha Tubulin [DM1A] Antibody NB100-690AF647 (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 directly conjugated to Alexa Fluor 647.**

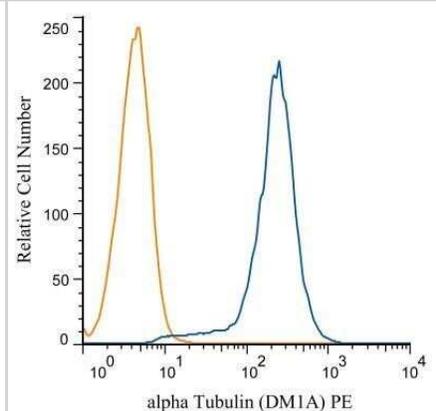


Copyright © 2020 Novus Biologicals

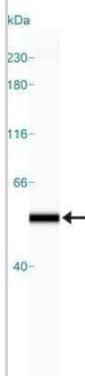
Flow Cytometry: alpha Tubulin Antibody (DM1A) - Azide and BSA Free [NBP2-80570] - Analysis of PE conjugate of NB100-690. An intracellular stain was performed on RAW 246.7 cells with Alpha Tubulin antibody (DM1A) NB100-690PE (blue) and a matched isotype control NBP2-27287PE (orange). Cells were fixed with 4% PFA and then permeablized with Image from the standard format of this antibody.



Flow Cytometry: alpha Tubulin Antibody (DM1A) - Azide and BSA Free [NBP2-80570] - Analysis of PE conjugate of NB100-690. An intracellular stain was performed on SH-SY5Y cells with Alpha Tubulin antibody (DM1A) NB100-690PE (blue) and a matched isotype control NBP2-27287PE (orange). Cells were fixed with 4% PFA and then permeablized with Image from the standard format of this antibody.



Simple Western: alpha Tubulin Antibody (DM1A) - Azide and BSA Free [NBP2-80570] - Simple Western lane view shows a specific band for alpha Tubulin in 1.0 mg/ml of HeLa lysate. This experiment was performed under reducing conditions using the 12-230 kDa separation system. Alpha tubulin molecular weight: 50 kDa. Image from the standard format of this antibody.





### **Novus Biologicals USA**

10730 E. Briarwood Avenue  
Centennial, CO 80112  
USA  
Phone: 303.730.1950  
Toll Free: 1.888.506.6887  
Fax: 303.730.1966  
nb-customerservice@bio-techne.com

### **Bio-Techne Canada**

21 Canmotor Ave  
Toronto, ON M8Z 4E6  
Canada  
Phone: 905.827.6400  
Toll Free: 855.668.8722  
Fax: 905.827.6402  
canada.inquires@bio-techne.com

### **Bio-Techne Ltd**

19 Barton Lane  
Abingdon Science Park  
Abingdon, OX14 3NB, United Kingdom  
Phone: (44) (0) 1235 529449  
Free Phone: 0800 37 34 15  
Fax: (44) (0) 1235 533420  
info.EMEA@bio-techne.com

### **General Contact Information**

www.novusbio.com  
Technical Support: nb-technical@bio-techne.com  
Orders: nb-customerservice@bio-techne.com  
General: novus@novusbio.com

### **Products Related to NBP2-80570**

---

HAF007	Goat anti-Mouse IgG Secondary Antibody [HRP]
NB720-B	Rabbit anti-Mouse IgG (H+L) Secondary Antibody [Biotin]
NBP1-43319-0.5mg	Mouse IgG1 Kappa Isotype Control (P3.6.2.8.1)
H00007846-Q01-10ug	Recombinant Human alpha Tubulin GST (N-Term) Protein

---

### **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.

For more information on our 100% guarantee, please visit [www.novusbio.com/guarantee](http://www.novusbio.com/guarantee)

Earn gift cards/discounts by submitting a review: [www.novusbio.com/reviews/submit/NBP2-80570](http://www.novusbio.com/reviews/submit/NBP2-80570)

Earn gift cards/discounts by submitting a publication using this product:  
[www.novusbio.com/publications](http://www.novusbio.com/publications)

