

# Product Datasheet

## MUL1 Antibody - BSA Free

### NBP2-31363-0.1mg

Unit Size: 0.1 mg

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/NBP2-31363](http://www.novusbio.com/NBP2-31363)

Updated 9/9/2025 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/NBP2-31363](http://www.novusbio.com/reviews/destination/NBP2-31363)



**NBP2-31363-0.1mg**

MUL1 Antibody - BSA Free

**Product Information**

<b>Unit Size</b>	0.1 mg
<b>Concentration</b>	1.0 mg/ml
<b>Storage</b>	Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.
<b>Clonality</b>	Polyclonal
<b>Preservative</b>	0.05% Sodium Azide
<b>Isotype</b>	IgG
<b>Purity</b>	Protein A purified
<b>Buffer</b>	PBS
<b>Target Molecular Weight</b>	39.8 kDa

**Product Description**

<b>Description</b>	Novus Biologicals Rabbit MUL1 Antibody - BSA Free (NBP2-31363) is a polyclonal antibody validated for use in WB and ICC/IF. All Novus Biologicals antibodies are covered by our 100% guarantee.
<b>Host</b>	Rabbit
<b>Gene ID</b>	79594
<b>Gene Symbol</b>	MUL1
<b>Species</b>	Human
<b>Reactivity Notes</b>	The immunogen sequence shows 99% similarity to Monkey's MUL1 and is 84% similar to isoform 1 and 3 of Mouse's MUL1 .
<b>Immunogen</b>	Partial recombinant protein made to a C-terminal portion of the human MUL1 protein (between residues 200-352) [UniProt Q969V5]

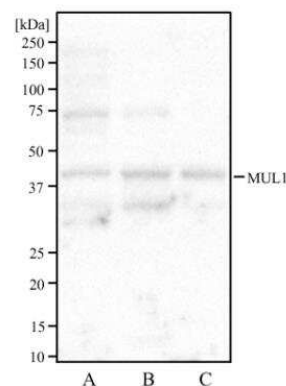
**Product Application Details**

<b>Applications</b>	Western Blot, Immunocytochemistry/ Immunofluorescence
<b>Recommended Dilutions</b>	Western Blot 2 ug/ml, Immunocytochemistry/ Immunofluorescence 0.1-2 ug/ml
<b>Application Notes</b>	<p>MUL1 (mitochondrial ubiquitin ligase activator of NFKB 1) is a 352 amino acids long protein (predicted molecular weight 39.8 kDa) which localizes to the mitochondrion's outer membrane as a multi-pass membrane protein and from there, it may get transported to the peroxisomes via mitochondrion-derived vesicles. In our Western blot validation, this MUL1 antibody detected a specific target band at ~40 kDa in human liver lysate.</p> <p>The observed molecular weight of the protein may vary from the listed predicted molecular weight due to post translational modifications, post translation cleavages, relative charges, and other experimental factors.</p>

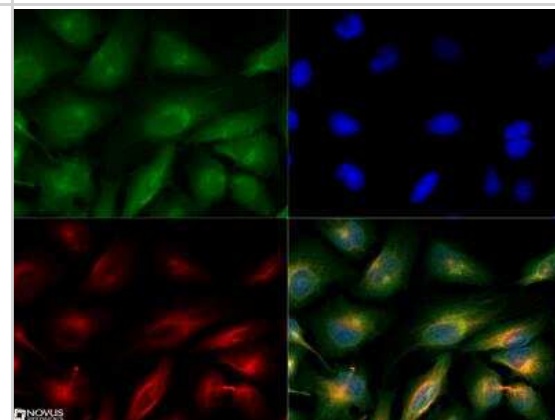


## Images

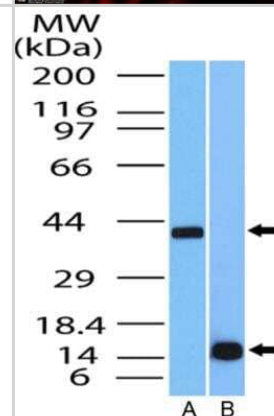
Western Blot: MUL1 Antibody [NBP2-31363] - Western blot analysis of K562 (A), Rt4 (B), and SH-SY5Y (C) cell lysate using MUL1 antibody at a concentration of 2 ug/ml.



Immunocytochemistry/Immunofluorescence: MUL1 Antibody [NBP2-31363] - MUL1 antibody was tested in HeLa cells with Dylight 488 (green). Nuclei and alpha-tubulin were counterstained with DAPI (blue) and Dylight 550 (red). An antibody concentration of 0.1 ug/ml was used.



Western Blot: MUL1 Antibody [NBP2-31363] - WB analysis of MUL1 protein in lysate of human liver and partial recombinant MUL1 protein by using the primary antibody concentration of 2ug/ml and 0.5 ug/ml respectively.



## Procedures

### Western Blot Protocol for MUL1 Antibody (NBP2-31363)

Reagents needed:

- a. Washing Buffer: Tris Buffer Saline with 0.01% of tween 20).
- b. Blocking Buffer: 5% skimmed milk powder in washing buffer).
- c. Secondary antibody, Horseradish peroxidase conjugated.
- d. Chemiluminescent solution (SuperSignal WestPico™, Pierce).

Western blot Method:

1. Perform SDS-PAGE using PVDF membrane. Cut into strips.
2. Activate strips with methanol by dipping them into methanol for 5 min.
3. Discard the methanol and take fresh methanol to repeat step b.
4. Let the strips dry, and then add blocking solution and incubate at RT in a shaker for 30-45 minutes.
5. Dilute primary antibody in blocking buffer. Incubate the number of strips required with the diluted primary antibody at room temperature for 2 hours in a shaker.
6. Wash strips two times with washing buffer at 30 minutes intervals.
7. Dilute HRP conjugated secondary antibody in blocking buffer. Add diluted secondary antibody to the membrane strips and incubate for exactly 1 hour while shaking at RT.
8. Wash the strips with washing buffer for 2-3 hours with 3 to 4 changes on a shaker. This helps in reducing the background staining.
9. Prepare the chemiluminescent solution (SuperSignal WestPico™) by mixing solution A and Solution B at 1:1. Mix well. Soak the strip in the chemiluminescent solution; keep for 3-5 minutes under constant shaking.
10. Expose the membrane to a sheet of film and develop.

### Immunocytochemistry/Immunofluorescence Protocol for MUL1 Antibody (NBP2-31363)

Immunocytochemistry Protocol

Culture cells to appropriate density on suitable glass coverslips in 35 mm culture dishes or 6-well plates.

1. Remove culture medium and add 10% formalin to the dish. Fix at room temperature for 5-10 minutes.
2. Remove the formalin and add 0.5% Triton-X 100 in TBS to permeabilize the cells. Incubate for 5-10 minutes.
3. Remove the permeabilization buffer and add wash buffer (i.e. PBS or PBS with 0.1% Tween-20). Be sure to not let the specimen dry out. Gently wash three times for 10 minutes.
4. Alternatively, cells can be fixed with -20C methanol for 10 min at room temperature. Remove the methanol and rehydrate in PBS for 10 min before proceeding.
5. To block nonspecific antibody binding incubate in 10% normal goat serum for 1 hour at room temperature.
6. Add primary antibody at appropriate dilution and incubate at room temperature for 1 hour or at 4 degrees C overnight.
7. Remove primary antibody and replace with wash buffer. Gently wash three times for 10 minutes.
8. Add secondary antibody at the appropriate dilution. Incubate for 1 hour at room temperature.
9. Remove antibody and replace with wash buffer. Gently wash three times for 10 minutes.
10. Nuclei can be staining with 4',6' diamino phenylindole (DAPI) at 0.1 ug/ml, or coverslips can be directly mounted in media containing DAPI.
11. Cells can now be viewed with a fluorescence microscope.

\*The above information is only intended as a guide. The researcher should determine what protocol best meets their needs. Please follow proper laboratory procedures for the disposal of formalin.





### **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 NBP2-31363-0.1mg**

HAF008	Goat anti-Rabbit IgG Secondary Antibody [HRP]
NB7160	Goat anti-Rabbit IgG (H+L) Secondary Antibody [HRP]
NBP2-24891	Rabbit IgG Isotype Control
H00079594-P01-10ug	Recombinant Human MUL1 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/NBP2-31363](http://www.novusbio.com/reviews/submit/NBP2-31363)

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

