

# Product Datasheet

## 4-1BB Ligand/TNFSF9 Antibody (AT113-2) [mFluor Violet 450 SE]

**NBP3-11987MFV450**

Unit Size: 0.1 ml

Store at 4C in the dark.

[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/NBP3-11987MFV450](http://www.novusbio.com/NBP3-11987MFV450)

Updated 5/1/2025 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/NBP3-11987MFV450](http://www.novusbio.com/reviews/destination/NBP3-11987MFV450)



**NBP3-11987MFV450**

4-1BB Ligand/TNFSF9 Antibody (AT113-2) [mFluor Violet 450 SE]

**Product Information**

<b>Unit Size</b>	0.1 ml
<b>Concentration</b>	Please see the vial label for concentration. If unlisted please contact technical services.
<b>Storage</b>	Store at 4C in the dark.
<b>Clonality</b>	Monoclonal
<b>Clone</b>	AT113-2
<b>Preservative</b>	0.05% Sodium Azide
<b>Isotype</b>	IgG1 Kappa
<b>Conjugate</b>	mFluor Violet 450 SE
<b>Purity</b>	Protein A purified
<b>Buffer</b>	50mM Sodium Borate

**Product Description**

<b>Host</b>	Rat
<b>Gene ID</b>	8744
<b>Gene Symbol</b>	TNFSF9
<b>Species</b>	Mouse
<b>Specificity/Sensitivity</b>	This antibody is specific for 4-1BB ligand (also known as CD137 ligand), which is a member of the TNF superfamily and is a type II membrane protein. 4-1BB ligand is a co-stimulatory molecule that is expressed on antigen presenting cells (DCs, monocytes/macrophages, B cells) and is upregulated upon activation of these cells. Both of the 4-1BB ligand and its receptor, TNFRSF9/4-1BB, are involved in the antigen presentation process and in the generation of cytotoxic T cells. In direct ELISAs, no cross-reactivity with recombinant human RELT is observed.
<b>Immunogen</b>	This antibody was raised by immunising LOU rats with soluble recombinant 4-1BB Ligand/TNFSF9:Fc fusion protein.

**Product Application Details**

<b>Applications</b>	Western Blot, Flow Cytometry, Block/Neutralize
<b>Recommended Dilutions</b>	Western Blot, Flow Cytometry, Block/Neutralize
<b>Application Notes</b>	Optimal dilution of this antibody should be experimentally determined.

**Images**

4-1BB Ligand/TNFSF9 Antibody (AT113-2) [mFluor Violet 450 SE] [NBP3-11987MFV450] - Vial of mFluor Violet 450 conjugated antibody. mFluor Violet 450 is optimally excited at 406 nm by the Violet laser (405 nm) and has an emission maximum of 445 nm.





### 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](http://www.novusbio.com)  
Technical Support: [nb-technical@bio-techne.com](mailto:nb-technical@bio-techne.com)  
Orders: [nb-customerservice@bio-techne.com](mailto:nb-customerservice@bio-techne.com)  
General: [novus@novusbio.com](mailto:novus@novusbio.com)

### Products Related to NBP3-11987MFV450

NBP1-51817MFV450	Rat IgG1 Kappa Light Chain Isotype Control (KLH/G1-2-2) [mFluor Violet 450 SE]
NBP2-26580	Recombinant Mouse 4-1BB Ligand/TNFSF9 Protein
210-TA-005	TNF-alpha [Unconjugated]
1246-4L-025/CF	4-1BB Ligand/TNFSF9 [Unconjugated]

### 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/NBP3-11987MFV450](http://www.novusbio.com/reviews/submit/NBP3-11987MFV450)

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



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



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