

# Product Datasheet

## 4-1BB Ligand/TNFSF9 Antibody (AT113-2) [PE] NBP3-11987PE

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

Updated 7/11/2023 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/NBP3-11987PE](http://www.novusbio.com/reviews/destination/NBP3-11987PE)



**NBP3-11987PE****4-1BB Ligand/TNFSF9 Antibody (AT113-2) [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	AT113-2
Preservative	0.05% Sodium Azide
Isotype	IgG1 Kappa
Conjugate	PE
Purity	Protein A purified
Buffer	PBS

Product Description	
Host	Rat
Gene ID	8744
Gene Symbol	TNFSF9
Species	Mouse
Specificity/Sensitivity	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.
Immunogen	This antibody was raised by immunising LOU rats with soluble recombinant 4-1BB Ligand/TNFSF9:Fc fusion protein.

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

**Images**

4-1BB Ligand/TNFSF9 Antibody (AT113-2) [PE] [NBP3-11987PE] - Vial of PE conjugated antibody. PE has two excitation maxima, 498 nm excited by the Blue laser (488 nm) and 565 nm excited by the Yellow-Green laser (561 nm). Both result in emission at 578 nm.



PE

LASER (nm)	FILTER
Blue (488)	582/15
Y-G (561)	
EXCITATION MAX (nm)	EMISSION MAX (nm)
498	578
565	



### 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 NBP3-11987PE

---

NBP1-51817PE	Rat IgG1 Kappa Light Chain Isotype Control (KLH/G1-2-2) [PE]
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/NBP3-11987PE](http://www.novusbio.com/reviews/submit/NBP3-11987PE)

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

