

# Product Datasheet

## CD40/TNFRSF5 Antibody (5D12) - Azide and BSA Free NBP2-81104-0.2mg

Unit Size: 0.2 mg

Store at 4C for up to 3 months. For longer storage, aliquot and store at -20C.

[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/NBP2-81104](http://www.novusbio.com/NBP2-81104)

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/NBP2-81104](http://www.novusbio.com/reviews/destination/NBP2-81104)



**NBP2-81104-0.2mg**

CD40/TNFRSF5 Antibody (5D12) - Azide and BSA Free

Product Information	
Unit Size	0.2 mg
Concentration	1 mg/ml
Storage	Store at 4C for up to 3 months. For longer storage, aliquot and store at -20C.
Clonality	Monoclonal
Clone	5D12
Preservative	0.02% Proclin 300
Isotype	IgG4 Kappa
Purity	Protein A purified
Buffer	PBS

Product Description	
Description	Novus Biologicals Human CD40/TNFRSF5 Antibody (5D12) - Azide and BSA Free (NBP2-81104) is a recombinant monoclonal antibody validated for use in IHC, ELISA, Flow and IP. All Novus Biologicals antibodies are covered by our 100% guarantee.
Host	Human
Gene ID	958
Gene Symbol	CD40
Species	Human, Cynomolgus Monkey
Reactivity Notes	Expected to react with Marmoset Monkey.
Specificity/Sensitivity	ch5D12 binds specifically to recombinant and native human CD40/TNFRSF5 ectodomain and has been shown to also bind CD40/TNFRSF5 in cynomolgus and marmoset monkeys. The antibody requires residues within D1 and D1/B2 for binding (Hager et al, 2003) (D1 domain is crucial for CD40L binding). Binding characteristics are very similar between humanized ch5D12 and mu5D12. CD40/TNFRSF5 is a glycoprotein of the TNFR superfamily and is expressed on all mature B cells, dendritic cells, activated monocytes, some endothelial cells and some epithelium including the thymus. CD40/TNFRSF5 binds to CD40L, and this interaction is involved in B-cell activation and proliferation, antigen-presenting cell (APC) activation, initiation of antigen-specific T-cell responses, immunoglobulin production, activation of effector macrophages isotype switching, homotypic adhesion and rescue from apoptosis.
Immunogen	Anti-CD40/TNFRSF5 mAb 5D12, was generated by immunizing mice with sf9 insect cells expressing recombinant human CD40/TNFRSF5 and selected for the ability to bind EBV-immortalized human B cells. The variable regions from mu5D12 were cloned and used to construct chimeric humanized IgG4 5D12.

Product Application Details	
Applications	ELISA, Flow Cytometry, Immunohistochemistry, Immunoprecipitation, Block/Neutralize, Surface Plasmon Resonance
Recommended Dilutions	Flow Cytometry, ELISA, Immunohistochemistry, Immunoprecipitation, Surface Plasmon Resonance, Block/Neutralize



**Application Notes**

ch5D12 is an antagonist of the CD40-CD40L pathway. ch5D12 binds to B cells and monocytes, but not to peripheral blood CD4+ and CD8+ cells. ch5D12 was tested in vivo using a marmoset EAE (experimental autoimmune encephalomyelitis) model (recombinant myelin oligodendrocyte glycoprotein (MOG) was used to induce EAE) - model for human multiple sclerosis. ch5D12 was able to prevent development of the symptoms of the disease during the treatment period, reduce the anti-MOG antibody response and reduce the formation of inflammatory lesions in the CNS. ch5D12 binding and specificity can be detected and measured by FC, SPR, ELISA and IP, and CD40+ cells can be stained by the antibody in IHC.





### **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 NBP2-81104-0.2mg**

---

G-102-C	Goat anti-Human IgG Secondary Antibody [Unconjugated]
NB7446	Goat anti-Human IgG Fc Secondary Antibody
NBP2-52199-0.05mg	Recombinant Mouse CD40/TNFRSF5 His Protein
210-TA-005	TNF-alpha [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/NBP2-81104](http://www.novusbio.com/reviews/submit/NBP2-81104)

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

