

# Product Datasheet

## CD40/TNFRSF5 Antibody (5D12) [mFluor Violet 610 SE] NBP2-81104MFV610

Unit Size: 0.1 ml

Store at 4C in the dark.

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**NBP2-81104MFV610**

CD40/TNFRSF5 Antibody (5D12) [mFluor Violet 610 SE]

| 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                       | 5D12                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Preservative                | 0.05% Sodium Azide                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Isotype                     | IgG4 Kappa                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Conjugate                   | mFluor Violet 610 SE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Purity                      | Protein A purified                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Buffer                      | 50mM Sodium Borate                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Product Description         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| 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           | Optimal dilution of this antibody should be experimentally determined.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |



## Images

CD40/TNFRSF5 Antibody (5D12) [mFluor Violet 610 SE] [NBP2-81104MFV610] - Vial of mFluor Violet 610 conjugated antibody. mFluor Violet 610 is optimally excited at 421 nm by the Violet laser (405 nm) and has an emission maximum of 613 nm.



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**Products Related to NBP2-81104MFV610**

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|                   |                                            |
|-------------------|--------------------------------------------|
| NBP2-52199-0.05mg | Recombinant Mouse CD40/TNFRSF5 His Protein |
| 210-TA-005        | TNF-alpha [Unconjugated]                   |
| DCCD40            | CD40/TNFRSF5 [HRP]                         |
| M6000B-1          | IL-6 [HRP]                                 |

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**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.

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