

# Product Datasheet

## Myogenin Antibody (5FD) - BSA Free NB100-56510

Unit Size: 0.1 mg

Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.

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**NB100-56510**

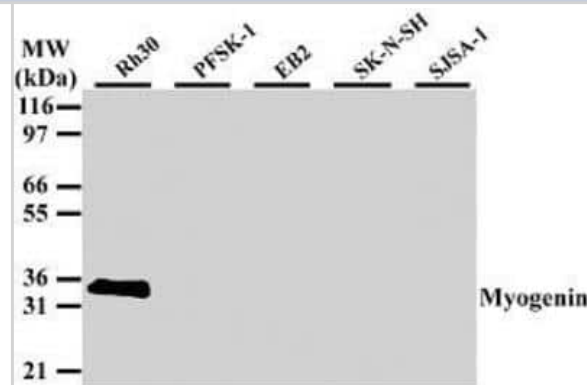
Myogenin Antibody (5FD) - BSA Free

| Product Information         |   |
|-----------------------------|---|
| Unit Size                   | 0.1 mg  |
| Concentration               | 1.0 mg/ml   |
| Storage                     | Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.  |
| Clonality                   | Monoclonal  |
| Clone                       | 5FD   |
| Preservative                | 0.05% Sodium Azide  |
| Isotype                     | IgG1  |
| Purity                      | Protein G purified  |
| Buffer                      | PBS   |
| Product Description         |   |
| Host                        | Mouse   |
| Gene ID                     | 4656  |
| Gene Symbol                 | MYOG  |
| Species                     | Human, Mouse, Rat   |
| Immunogen                   | A recombinant protein corresponding to amino acids 30-224 of rat myogenin was used as immunogen (NP_002470).  |
| Product Application Details |   |
| Applications                | Western Blot, Immunocytochemistry/ Immunofluorescence, Immunohistochemistry, Immunohistochemistry-Frozen, Immunohistochemistry-Paraffin   |
| Recommended Dilutions       | Western Blot 2 ug/mL, Immunohistochemistry 1:20 - 1:1000, Immunocytochemistry/ Immunofluorescence 5 ug/mL, Immunohistochemistry-Paraffin 20 - 40 ug/mL, Immunohistochemistry-Frozen 10 - 20 ug/mL |

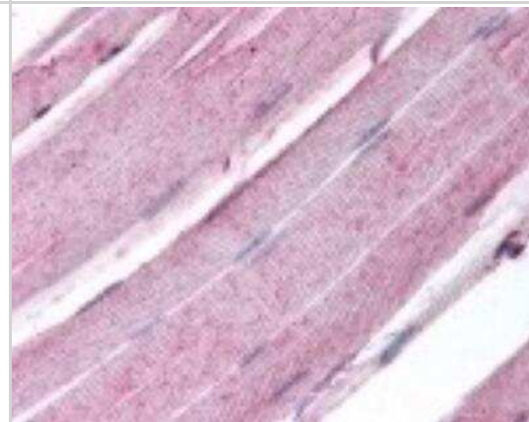


## Images

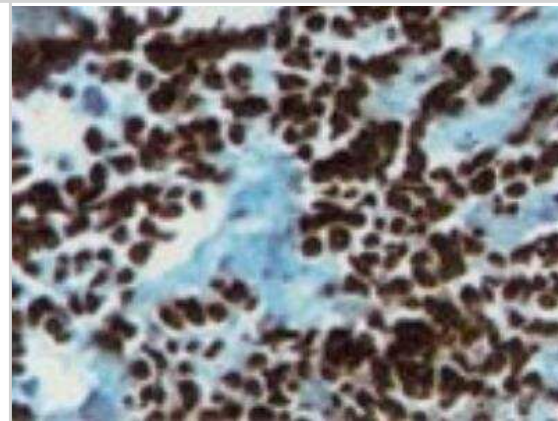
Western Blot: Myogenin Antibody (5FD) [NB100-56510] - Analysis of Myogenin expression in various small-round cell tumor lines. The antibody strongly reacted with a band at ~34 kDa in alveolar rhabdomyosarcoma line (Rh30). Negative cell lines were PFSK-1, EB2, SK-N-SH, and SJSA-1.



Immunohistochemistry: Myogenin Antibody (5FD) [NB100-56510] - Human myocytes using NB100-56703 at 2.5 ug/mL. Hematoxylin-eosin counterstain.



Immunohistochemistry-Frozen: Myogenin Antibody (5FD) [NB100-56510] - Analysis of Myogenin in human alveolar rhabdomyosarcoma using NB100-56510 at 5 ug/mL.



## Publications

Li X, Zhu Y, Zhang H et al. MicroRNA-106a-5p Inhibited C2C12 Myogenesis via Targeting Plk3R1 and Modulating the PI3k/AkT Signaling. *Genes (Basel)*. 2018-07-02 [PMID: 30004470]

Chenchen Li, Haigang Cao, Yingchun Ren, Jinrui Jia, Gongshe Yang, Jianjun Jin, Xin'e Shi Eicosapentaenoic acid-mediated activation of PGAM2 regulates skeletal muscle growth and development via the PI3K/AKT pathway. *International journal of biological macromolecules* 2024-04-17 [PMID: 38641281]

Nakazawa K, Shaw T, Song YK et al. Piperacetazine directly binds to the PAX3::FOXO1 fusion protein and inhibits its transcriptional activity *Cancer research communications* 2023-09-21 [PMID: 37732905] (WB, Human)

Hammers DW, Hart CC, Matheny MK et al. Filopodia powered by class x myosin promote fusion of mammalian myoblasts *eLife* 2021-09-14 [PMID: 34519272] (B/N)

Cao, H;Du, T;Li, C;Wu, L;Liu, J;Guo, Y;Li, X;Yang, G;Jin, J;Shi, X; MicroRNA-668-3p inhibits myoblast proliferation and differentiation by targeting Appl1 *BMC genomics* 2023-07-24 [PMID: 37488537] (B/N, WB)

Zhao T, Zhao R, Yi X et al. METTL3 promotes proliferation and myogenic differentiation through m6A RNA methylation/YTHDF1/2 signaling axis in myoblasts *Life sciences* 2022-03-26 [PMID: 35351467] (WB, Mouse)

Flavie Ouali BE, Wang HV Beta-agonist drugs modulate the proliferation and differentiation of skeletal muscle cells in vitro *Biochemistry and biophysics reports* 2021-07-01 [PMID: 34041371] (WB, Mouse)

Peng Y, Xu M, Dou M et al. MicroRNA-129-5p Inhibited C2C12 Myogenesis and Repressed Slow Fiber Gene Expression in vitro *American journal of physiology. Cell physiology* 2021-04-07 [PMID: 33826407]

Cai R, Zhang Q, Wang Y et al. Lnc-ORA interacts with microRNA-532-3p and IGF2BP2 to inhibit skeletal muscle myogenesis *The Journal of biological chemistry* 2021-02-03 [PMID: 33548229] (WB, Mouse)

Liu S, Sun Y, Zhao R et al. Isoleucine increases muscle mass through promoting myogenesis and intramyocellular fat deposition *Food Funct.* 2020-11-16 [PMID: 33289736]

Osaki T, Uzel SGM, Kamm RD On-chip 3D neuromuscular model for drug screening and precision medicine in neuromuscular disease *Nat Protoc.* [PMID: 31932771] (FLOW, Human)

McCoy CR, Stadelman BS, Brumaghim JL et al. Arsenic and Its Methylated Metabolites Inhibit the Differentiation of Neural Plate Border Specifier Cells *Chem. Res. Toxicol.* 2015-06-10 [PMID: 26024302] (IHC-P, Mouse)

### Details:

SOX10 antibody (clone 1E6) was used for IHC-P staining of embryoid bodies which were generated / differentiated from mouse P19 mouse embryonal carcinoma cell line using the hanging drop method (Wang and Yang 2008, *J Visualized Exp.* 17, 825). The staining assay implicated antigen retrieval via citric acid buffer pH 6 using microwave, 1 hour blocking with 1× PBS, 5%BSA, and 0.05% Tween-20, use of primary at 1:200 dilution with 4C ON incubation, detection with Alexa Fluor conjugated secondary antibody (Figure 2, Figure 4).

More publications at <http://www.novusbio.com/NB100-56510>





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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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