

# Product Datasheet

## Defensin alpha 5 Antibody (8C8) - BSA Free NB110-60002

Unit Size: 0.1 ml

Aliquot and store at -20C or -80C. Avoid freeze-thaw cycles.

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**NB110-60002**

Defensin alpha 5 Antibody (8C8) - BSA Free

Product Information	
Unit Size	0.1 ml
Concentration	2.35 mg/ml
Storage	Aliquot and store at -20C or -80C. Avoid freeze-thaw cycles.
Clonality	Monoclonal
Clone	8C8
Preservative	0.05% Sodium Azide
Isotype	IgG2b
Purity	Protein G purified
Buffer	Tris-Glycine and 0.15M NaCl
Target Molecular Weight	10 kDa

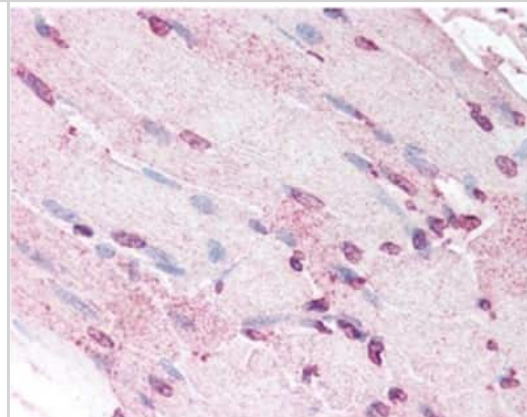
Product Description	
Host	Mouse
Gene ID	1670
Gene Symbol	DEFA5
Species	Human
Specificity/Sensitivity	This is specific for HD5. It does not cross-react with HD6, lysozyme or sPLA2.
Immunogen	Full-length human Defensin alpha 5 [Swiss-Prot# Q01523]. The propeptide is the full-length protein. In the mature form, it is cleaved at residue 63 (alanine).

Product Application Details	
Applications	Western Blot, Dot Blot, ELISA, Flow Cytometry, Immunocytochemistry/Immunofluorescence, Immunohistochemistry, Immunohistochemistry-Frozen, Immunohistochemistry-Paraffin
Recommended Dilutions	Western Blot 1:1000, Flow Cytometry 1 ug per million cells, ELISA reported in scientific literature, Immunohistochemistry 5-10 ug/ml, Immunocytochemistry/Immunofluorescence 1:200-1:1000, Immunohistochemistry-Paraffin 5-10 ug/ml, Immunohistochemistry-Frozen reported in scientific literature (PMID 30612153), Dot Blot reported in scientific literature
Application Notes	The observed molecular weight of the protein may vary from the listed predicted molecular weight due to post translational modifications, post translation cleavages, relative charges, and other experimental factors.

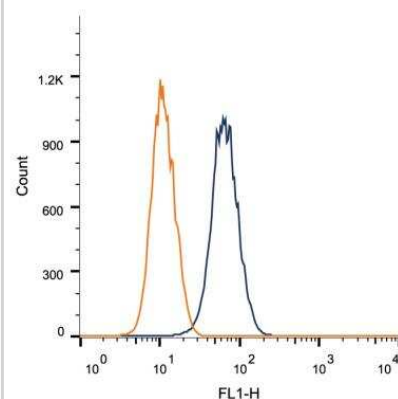


## Images

Immunohistochemistry: Defensin alpha 5 Antibody (8C8) [NB110-60002] - Human skeletal muscle myocytes showing moderate nuclear and faint cytoplasmic staining.



Flow Cytometry: Defensin alpha 5 Antibody (8C8) [NB110-60002] - Intracellular flow cytometric staining of  $1 \times 10^6$  MCF-7 cells using Defensin alpha 5 antibody (dark blue). Isotype control shown in orange. An antibody concentration of 1 ug/ $1 \times 10^6$  cells was used.



## Publications

Sanchez J, Rankin S, Paul E et al. Human organoid modeling of congenital malformations caused by RFX6 mutations reveal an essential role for this transcription factor in establishing and maintaining duodenal identity upstream of PDX1 bioRxiv 2023-11-11

Balasubramanian I, Bandyopadhyay S, Flores J et al. Infection and inflammation stimulate expansion of a CD74+ Paneth cell subset to regulate disease progression The EMBO journal 2023-09-18 [PMID: 37718683] (ICC/IF, Human)

McCauley HA, Riedman AM, Enriquez JR et al. Enteroendocrine Cells Protect the Stem Cell Niche by Regulating Crypt Metabolism in Response to Nutrients Cellular and Molecular Gastroenterology and Hepatology 2023-01-04 [PMID: 36608902] (Immunocytochemistry/ Immunofluorescence)

Che YH, Choi IY, Song CE et al. Peripheral Neuron-Organoid Interaction Induces Colonic Epithelial Differentiation via Non-Synaptic Substance P Secretion International Journal of Stem Cells 2023-08-30 [PMID: 37385635] (ELISA, Western Blot, Immunocytochemistry/ Immunofluorescence)

Hoffmann S Characterization and establishment of advanced intestinal cell culture models and the evaluation of potential new biomarkers for the prediction of drug-induced intestinal toxicity Thesis 2023-01-01 (Western Blot, Human)

Liu TC, Kern JT, Jain U et al. Western diet induces Paneth cell defects through microbiome alterations and farnesoid X receptor and type I interferon activation Cell host & microbe 2021-05-12 [PMID: 34010595]

Lim A, Nadkarni R, Courteau B, Draper J Comparison of human and mouse fetal intestinal tissues reveals differential maturation timelines bioRxiv 2020-06-19 (IHC-P, IF/IHC, Human)

Jabari S, Schrod F, Kaser-Eichberger A et al. Alarin in different human intestinal epithelial cell types. Histochem. Cell Biol. 2019-01-05 [PMID: 30612153] (IHC-Fr, Human)

Cerrillo E, Moret I, Iborra M et al. Alpha-defensins (a-Def5) in Crohn's disease: Decrease of ileal a-Def 5 via permanent methylation and increase in plasma a-Def 1-3 concentrations offering biomarker utility Clin. Exp. Immunol. 2017-11-28 [PMID: 29193023] (Human)

Múnera JO, Sundaram N, Rankin SA et al. Differentiation of Human Pluripotent Stem Cells into Colonic Organoids via Transient Activation of BMP Signaling. Cell Stem Cell. 2017-06-20 [PMID: 28648364]

Liu TC, Gurram B, Baldridge MT et al. Paneth cell defects in Crohn's disease patients promote dysbiosis. JCI Insight 2016-06-02 [PMID: 27699268]

Liu TC, Naito T, Liu Z et al. LRRK2 but not ATG16L1 is associated with Paneth cell defect in Japanese Crohn's disease patients. JCI Insight. 2017-03-23 [PMID: 28352666] (IHC-P, Human)

More publications at <http://www.novusbio.com/NB110-60002>





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### **Products Related to NB110-60002**

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NB820-59253	Human Skeletal Muscle Whole Tissue Lysate (Adult Whole Normal)
HAF007	Goat anti-Mouse IgG Secondary Antibody [HRP]
NB720-B	Rabbit anti-Mouse IgG (H+L) Secondary Antibody [Biotin]
NBP2-27231	Mouse IgG2b Isotype Control (MPC-11)

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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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