

# Product Datasheet

## TOMM20 Antibody (4F3) - Azide and BSA Free H00009804-M01

Unit Size: 0.1 mg

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

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**H00009804-M01**

TOMM20 Antibody (4F3) - Azide and BSA Free

**Product Information**

<b>Unit Size</b>	0.1 mg
<b>Concentration</b>	Concentrations vary lot to lot. See vial label for concentration. If unlisted please contact technical services.
<b>Storage</b>	Aliquot and store at -20C or -80C. Avoid freeze-thaw cycles.
<b>Clonality</b>	Monoclonal
<b>Clone</b>	4F3
<b>Preservative</b>	No Preservative
<b>Isotype</b>	IgG1 Kappa
<b>Purity</b>	IgG purified
<b>Buffer</b>	In 1x PBS, pH 7.4

**Product Description**

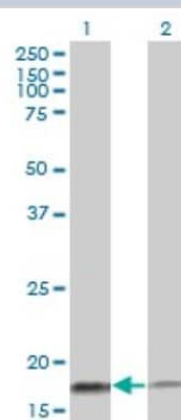
<b>Host</b>	Mouse
<b>Gene ID</b>	9804
<b>Gene Symbol</b>	TOMM20
<b>Species</b>	Human, Mouse, Rat
<b>Specificity/Sensitivity</b>	TOMM20 - translocase of outer mitochondrial membrane 20 homolog (yeast)
<b>Immunogen</b>	TOMM20 (AAH66335, 1 a.a. ~ 145 a.a) full-length recombinant protein with GST tag. MW of the GST tag alone is 26 KDa. MVGRNSAIAAGVCGALFIGYCIYFDRKRRSDPNFKNRLRERRKKQKLAKERAG LSKLPDLKDAEAVQKFFLEEIQLGEELLAQGEYEKGV DHLTNAIAVCGQPQQLL QVLQQTLPVPVFQMLLTKLPTISQRIVSAQSLAEDDVE
<b>Notes</b>	This product is produced by and distributed for Abnova, a company based in Taiwan.

**Product Application Details**

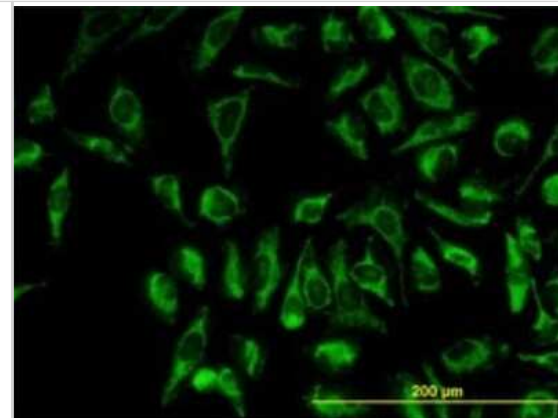
<b>Applications</b>	Western Blot, ELISA, Flow Cytometry, Immunocytochemistry/ Immunofluorescence, Immunohistochemistry, Immunohistochemistry-Paraffin
<b>Recommended Dilutions</b>	Western Blot 1:500, Flow Cytometry, ELISA 1:100-1:2000, Immunohistochemistry 1:10-1:500, Immunocytochemistry/ Immunofluorescence 1:10-1:500, Immunohistochemistry-Paraffin 1:10-1:500
<b>Application Notes</b>	Use in FLOW cytometry reported in scientific literature ( PMID 26779811).

**Images**

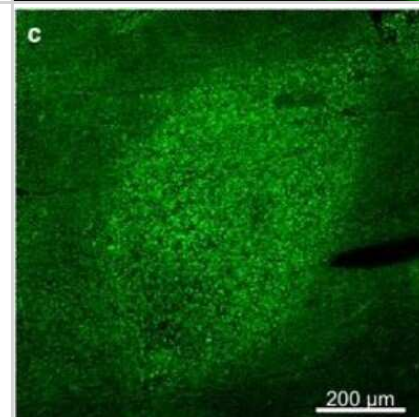
Western Blot: TOMM20 Antibody (4F3) [H00009804-M01] - Analysis of TOMM20 expression in transfected 293T cell line by TOMM20 monoclonal antibody (M01), clone 4F3. Lane 1: TOMM20 transfected lysate (16.3 KDa). Lane 2: Non-transfected lysate.



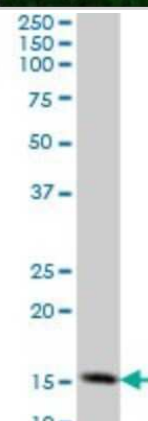
Immunocytochemistry/Immunofluorescence: TOMM20 Antibody (4F3) [H00009804-M01] - Analysis of monoclonal antibody to TOMM20 on HeLa cell. Antibody concentration 10 ug/ml.



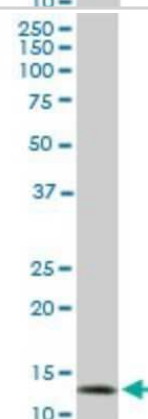
Immunohistochemistry: TOMM20 Antibody (4F3) [H00009804-M01] - Upregulation of GAPDH and TOMM20 in C6 glioma. A small glioma labeled with an antibody against Tom20. The brightness and contrast have been increased. Image collected and cropped by CiteAb from the following publication (<https://www.biomedcentral.com/1756-0500/8/207>), licensed under a CC-BY license.



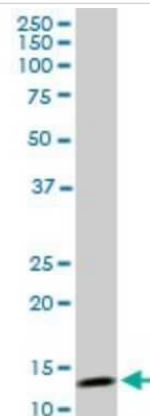
Western Blot: TOMM20 Antibody (4F3) [H00009804-M01] - TOMM20 monoclonal antibody (M01), clone 4F3 Analysis of TOMM20 expression in HeLa.



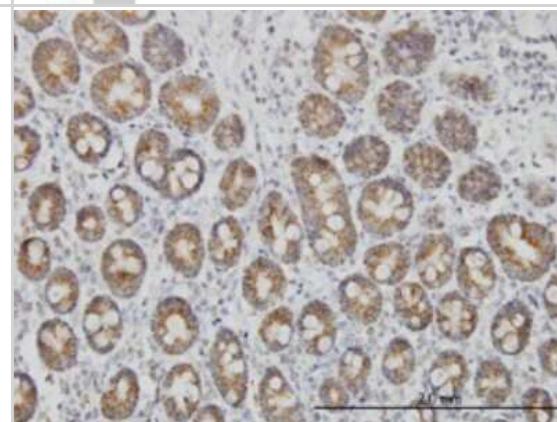
Western Blot: TOMM20 Antibody (4F3) [H00009804-M01] - TOMM20 monoclonal antibody (M01), clone 4F3. Analysis of TOMM20 expression in PC-12.



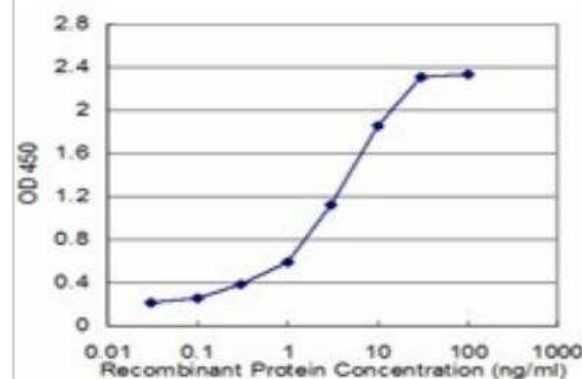
**Western Blot: TOMM20 Antibody (4F3) [H00009804-M01] - TOMM20 monoclonal antibody (M01), clone 4F3. Analysis of TOMM20 expression in NIH/3T3.**



**Immunohistochemistry-Paraffin: TOMM20 Antibody (4F3) [H00009804-M01] - Analysis of monoclonal antibody to TOMM20 on formalin-fixed paraffin-embedded human small Intestine. Antibody concentration 3 ug/ml.**



**ELISA: TOMM20 Antibody (4F3) [H00009804-M01] - Detection limit for recombinant GST tagged TOMM20 is approximately 0.1ng/ml as a capture antibody.**



**Immunocytochemistry/ Immunofluorescence: TOMM20 Antibody (4F3) [H00009804-M01] - Upregulation of GAPDH & Tom20 in C6 gliomas. a A section of rat brain stained with hematoxylin & eosin to show a glioma produced by implantation of C6 cells in the right caudate nucleus. In this case, cells also grew in the region of the syringe needle track through the cortex. (b–d). A small glioma labeled by bisbenzamide (b) & with antibodies against Tom20 (c) & GAPDH (d). The brightness & contrast have been increased. e Illustration of a strip perpendicular to the rim of a glioma (labeled with bisbenzamide) & along which intensity profiles were measured. f, g Tom20 & GAPDH fluorescence along such a strip (barely visible without enhancement). The graphs show the raw intensity values given by ImageJ. Image collected & cropped by CiteAb from the following publication (<https://pubmed.ncbi.nlm.nih.gov/26032618>), licensed under a CC-BY license. Not internally tested by Novus Biologicals.**



## Publications

Zhang QQ, Luo L, Liu MX et al. Enriched Environment-Induced Neuroprotection against Cerebral Ischemia-Reperfusion Injury Might Be Mediated via Enhancing Autophagy Flux and Mitophagy Flux Mediators of Inflammation 2022-01-01 [PMID: 35795405]

So HK, Kim H, Lee J et al. Protein Arginine Methyltransferase 1 Ablation in Motor Neurons Causes Mitochondrial Dysfunction Leading to Age-related Motor Neuron Degeneration with Muscle Loss Research (Washington, D.C.) 2023-06-19 [PMID: 37342629]

Grillon E, Farion R, Reuveni M et al. Spatial profiles of markers of glycolysis, mitochondria, and proton pumps in a rat glioma suggest coordinated programming for proliferation. BMC Res Notes 2015-01-01 [PMID: 26032618]

Greiser M, Karbowski M, Kaplan AD et al. Calcium and bicarbonate signaling pathways have pivotal, resonating roles in matching ATP production to demand eLife 2023-06-05 [PMID: 37272417] (IHC)

Details:

1:100 IHC-P dilution

Eszter C, Nikolett L, Csaba C et al. Microglia modulate blood flow, neurovascular coupling, and hypoperfusion via purinergic actions. J Exp Med. 2022-02-24 [PMID: 35201268]

Beatrice P, Vignesh R, Paradesi G et al. Metabolic impairment of non-small cell lung cancers by mitochondrial HSPD1 targeting. J Exp Clin Cancer Res. 2021-08-07 [PMID: 34364401]

Lewis C, Dixit B, Batiuk E et al. Codon optimization is an essential parameter for the efficient allotopic expression of mtDNA genes. Redox Biol. 2020-01-11 [PMID: 31981894]

Marie-France D, Mukandila M, Shuya K et al. The CD36 Ligand-Promoted Autophagy Protects Retinal Pigment Epithelial Cells from Oxidative Stress. Oxid Med Cell Longev. 2021-03-28 [PMID: 33854697]

Su K, Byeong-Yun A, Thi T et al. PRMT1 suppresses doxorubicin-induced cardiotoxicity by inhibiting endoplasmic reticulum stress. Cell Signal. 2022-07-18 [PMID: 35863589]

Soo S, Yunkwon N, Yong P et al. Therapeutic effects of non-saponin fraction with rich polysaccharide from Korean red ginseng on aging and Alzheimer's disease. Free Radic Biol Med. 2021-01-07 [PMID: 33422674]

Tsitoura E, Vasarmidi E, Bibaki E et al. Accumulation of damaged mitochondria in alveolar macrophages with reduced OXPHOS related gene expression in IPF. Respir Res. 2019-11-27 [PMID: 31775876]

Pandey J, Larson-Casey JL, Patil MH et al. NOX4-TIM23 interaction regulates NOX4 mitochondrial import and metabolic reprogramming The Journal of biological chemistry 2023-04-10 [PMID: 37044213] (WB, Mouse, Human)

More publications at <http://www.novusbio.com/H00009804-M01>





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### **Products Related to H00009804-M01**

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HAF007	Goat anti-Mouse IgG Secondary Antibody [HRP]
NB720-B	Rabbit anti-Mouse IgG (H+L) Secondary Antibody [Biotin]
NBP1-43319-0.5mg	Mouse IgG1 Kappa Isotype Control (P3.6.2.8.1)
NBP2-22883	Recombinant Human TOMM20 His Protein

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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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