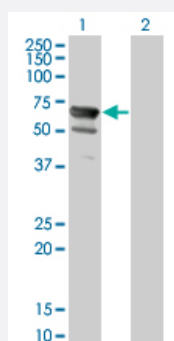


NT5C2 monoclonal antibody (M02), clone 3C1

Catalog # H00022978-M02

Size 100 ug

Applications

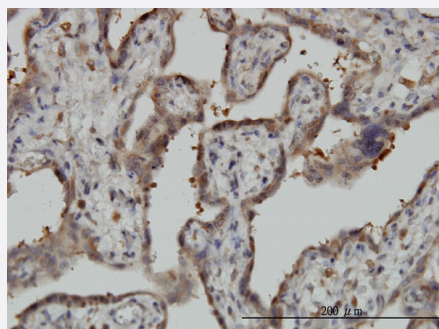


Western Blot (Transfected lysate)

Western Blot analysis of NT5C2 expression in transfected 293T cell line by NT5C2 monoclonal antibody (M02), clone 3C1.

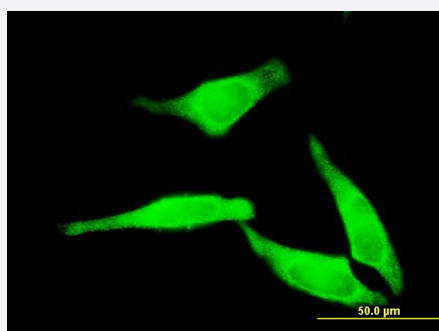
Lane 1: NT5C2 transfected lysate(64.97 KDa).

Lane 2: Non-transfected lysate.



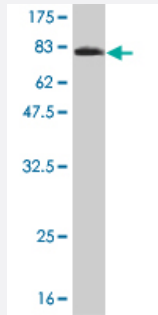
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

Immunoperoxidase of monoclonal antibody to NT5C2 on formalin-fixed paraffin-embedded human placenta. [antibody concentration 3 ug/ml]



Immunofluorescence

Immunofluorescence of monoclonal antibody to NT5C2 on HeLa cell . [antibody concentration 10 ug/ml]



Western Blot detection against Immunogen (87.45 KDa) .

Specification

Product Description	Mouse monoclonal antibody raised against a full length recombinant NT5C2.
Immunogen	NT5C2 (AAH01595, 1 a.a. ~ 561 a.a) full-length recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
Sequence	MSTSWSDRLQNAADMPANMDKHALKKYRREAYHRVFNRLAMEKIKCFGFDMDYTLAVYKSP EYESLGFELTVERLVSIGYPQELLSFAYDSTFPTRGLVFDLTLYGNLLKVDAYGNLLVCAHGPNFIRG PETREQYPNKFQIRDDTERFYLNLTFLNPETYLLACLVDFFTNCPRYTSCETGFKDGDLFMSYRSM FQDVRDAVDWVHYKGSLEKKTVENLEKYVVKDGKPLLLSRMKEVGKVFLATNSDYKYTDKIMTY LDFDPHGPKPGSSHRPWQSYFDLILVDARKPLFFGEGTVLRQVDTKTGKLKIGTYTGPLQHGMYS GGSSDTICDLLGAKGKDILYIGDHIFGDILKSKKRQGWRTFLVIPELAQELHVWTDKSSLFEELQSL DIFLAELYKHLDDSSNERPDISSIQRRIKKVTHDMDMCYGMMSGSLFRSGSRQTLFASQVMRYADLY AASFNLLYPFSYLFRAAHVLMPESTVEHHTVDINEMESPLATRNRTSVDFKDDTYKRHQLTRSI SEIKPPNLFPLAPQEITHCHDEDDDEEEEEEEEE
Host	Mouse
Reactivity	Human
Interspecies Antigen Sequence	Mouse (99)
Isotype	IgG2a Kappa
Quality Control Testing	Antibody Reactive Against Recombinant Protein. Western Blot detection against Immunogen (87.45 KDa) .
Storage Buffer	In 1x PBS, pH 7.4
Storage Instruction	Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.

Applications

- Western Blot (Transfected lysate)

Western Blot analysis of NT5C2 expression in transfected 293T cell line by NT5C2 monoclonal antibody (M02), clone 3C1.

Lane 1: NT5C2 transfected lysate(64.97 KDa).

Lane 2: Non-transfected lysate.

[Protocol Download](#)

- Western Blot (Recombinant protein)

[Protocol Download](#)

- Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

Immunoperoxidase of monoclonal antibody to NT5C2 on formalin-fixed paraffin-embedded human placenta. [antibody concentration 3 ug/ml]

[Protocol Download](#)

- ELISA

- Immunofluorescence

Immunofluorescence of monoclonal antibody to NT5C2 on HeLa cell . [antibody concentration 10 ug/ml]

Gene Info — NT5C2

Entrez GeneID [22978](#)

GeneBank Accession# [BC001595](#)

Protein Accession# [AAH01595](#)

Gene Name NT5C2

Gene Alias GMP, NT5B, PNT5, cN-II

Gene Description 5'-nucleotidase, cytosolic II

Omim ID [600417](#)

Gene Ontology [Hyperlink](#)

Gene Summary Purine 5-prime-nucleotidase (EC 3.1.3.5) preferentially hydrolyzes inosine 5-prime-monophosphate (IMP) and other purine nucleotides, and is allosterically activated by various compounds, including ATP. The enzyme is exclusively located in the cytoplasmic matrix of cells and may have a critical role in the maintenance of a constant composition of intracellular purine/pyrimidine nucleotides in cooperation with other nucleotidases.[supplied by OMIM]

Other Designations

5'-nucleotidase (purine), cytosolic type B|IMP-specific 5'-NT|OTTHUMP00000059167|purine 5' nucleotidase

Publication Reference

- [Schizophrenia risk proteins ZNF804A and NT5C2 interact in cortical neurons.](#)

Afra Aabdien, Laura Sichlinger, Zoe Borgel, Madeleine R Jones, Iain A Waston, Nicholas J F Gatford, Pooja Raval, Lloyd Tanangonan, Timothy R Powell, Rodrigo R R Duarte, Deepak P Srivastava.

The European Journal of Neuroscience 2024 Jan; [Epub].

Application: ICC, Human, Rat, HEK293 cells, Rat primary cortical neurons

- [CD73 and cN-II regulate the cellular response to chemotherapeutic and hypoxic stress in lung adenocarcinoma cells.](#)

Muhammad-Zawwad Raza, Octavia Cadassou, Charles Dumontet, Emeline Cros-Perrial, Lars Petter Jordheim.

Biochimica et Biophysica acta. General Subjects 2021 Jan; 1865(5):129842.

Application: WB-Tr, Human, NCI-H292 cells

- [The Psychiatric Risk Gene NT5C2 Regulates Adenosine Monophosphate-Activated Protein Kinase Signaling and Protein Translation in Human Neural Progenitor Cells.](#)

Duarte RRR, Bachtel ND, Côté MC, Lee SH, Selvakadunco S, Watson IA, Hovsepian GA, Troakes C, Breen GD, Nixon DF, Murray RM, Bray NJ, Eleftherianos I, Vernon AC, Powell TR, Srivastava DP.

Biological Psychiatry 2019 Jul; 86(2):120.

Application: IF, IHC-P, Human, Human brains, Human neural progenitor cells

- [SAMHD1 is a biomarker for cytarabine response and a therapeutic target in acute myeloid leukemia.](#)

Schneider C, Oellerich T, Baldauf HM, Schwarz SM, Thomas D, Flick R, Bohnenberger H, Kaderali L, Stegmann L, Cremer A, Martin M, Lohmeyer J, Michaelis M, Hornung V, Schliemann C, Berdel WE, Hartmann W, Wardelmann E, Comoglio F, Hansmann ML, Yakunin AF, Geisslinger G, Ströbel P, Ferreirós N, Serve H, Keppler OT, Cinatl J Jr.

Nature Medicine 2016 Dec; 23(2):250.

Application: WB-Ce, Human, Acute myeloid leukemia (AML) cell lines: ML2, Molm13, Mono Mac6, MV4-11, NB4, HEL, HL-60, KG-1, OCI-AML2, OCI-AML3, PL21, SIG-M5, THP-1 cells

- [Cell proliferation and drug sensitivity of human glioblastoma cells are altered by the stable modulation of cytosolic 5'-nucleotidase II.](#)

Cividini F, Cros-Perrial E, Pesi R, Machon C, Allegrini S, Camici M, Dumontet C, Jordheim LP, Tozzi MG.

The International Journal of Biochemistry & Cell Biology 2015 Aug; 65:222.

Application: WB-Tr, Human, ADF cells

- [Determination of the enzymatic activity of cytosolic 5'-nucleotidase cN-II in cancer cells: development of a simple analytical method and related cell line models.](#)

Jordheim LP, Puy JY, Cros-Perrial E, Peyrottes S, Lefebvre I, Perigaud C, Dumontet C.

Analytical and Bioanalytical Chemistry 2015 Jul; 407(19):5747.

Application: WB-Tr, Human, RL, HL-60, K562, GRANTA, CCRF-CEM cells

- [Cytosolic 5-Nucleotidase II Interacts with the Leucin Rich Repeat of NLR Family Member Ipaf.](#)

Cividini F, Tozzi MG, Galli A, Pesi R, Camici M, Dumontet C, Jordheim LP, Allegrini S

PLoS One 2015 Mar; 10(3):e0121525.

Application: IP-WB, WB, WB-Tr, Human, HEK 293T, A549-pScont, A549-pScN-II, MDA-MB-231-pScont, MDA-MB-231-pScN-II cells

- [Suppression of 5'-Nucleotidase Enzymes Promotes AMP-activated Protein Kinase \(AMPK\) Phosphorylation and Metabolism in Human and Mouse Skeletal Muscle.](#)

Kulkarni SS, Karlsson HK, Szekeres F, Chibalin AV, Krook A, Zierath JR.

The Journal of Biological Chemistry 2011 Oct; 286(40):34567.

Application: WB-Tr, Human, Human myotubes

Pathway

- [Biosynthesis of alkaloids derived from histidine and purine](#)
- [Metabolic pathways](#)
- [Nicotinate and nicotinamide metabolism](#)
- [Purine metabolism](#)
- [Pyrimidine metabolism](#)

Disease

- [Alzheimer Disease](#)
- [Genetic Predisposition to Disease](#)
- [Hypertension](#)