10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.622.0609

NDRG2 Antibody (monoclonal) (M03)

Mouse monoclonal antibody raised against a partial recombinant NDRG2.

Catalog # AT2992a

Specification

NDRG2 Antibody (monoclonal) (M03) - Product Information

Application	**WB, E**
Primary Accession	O9UN36
Other Accession	NM_016250
Reactivity	**Human**
Host	**mouse**
Clonality	**Monoclonal**
Isotype	**IgG1 Kappa**
Calculated MW	**40798**

NDRG2 Antibody (monoclonal) (M03) - Additional Information

Gene ID 57447

Other Names
Protein NDRG2, N-myc downstream-regulated gene 2 protein, Protein Syld709613, NDRG2, KIAA1248, SYLD

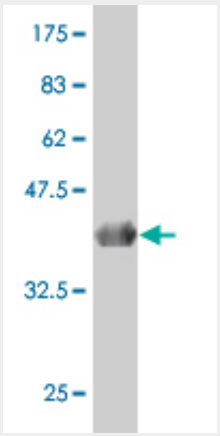
Target/Specificity
NDRG2 (NP_057334, 1 a.a. ~ 96 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.

Dilution
WB~~1:500~1000

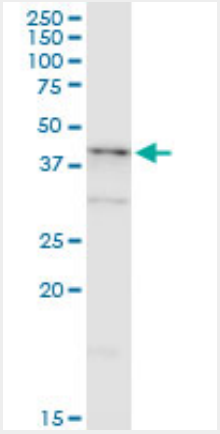
Format
Clear, colorless solution in phosphate buffered saline, pH 7.2 .

Storage
Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.

Precautions
NDRG2 Antibody (monoclonal) (M03) is for research use only and not for use in diagnostic or therapeutic procedures.



Antibody Reactive Against Recombinant Protein.Western Blot detection against Immunogen (36.3 KDa) .



NDRG2 monoclonal antibody (M03), clone 6A5. Western Blot analysis of NDRG2 expression in Hela S3 NE.

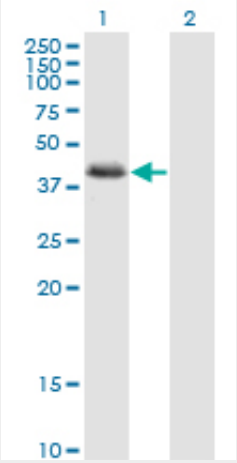
NDRG2 Antibody (monoclonal) (M03) -

10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.622.0609

Protocols

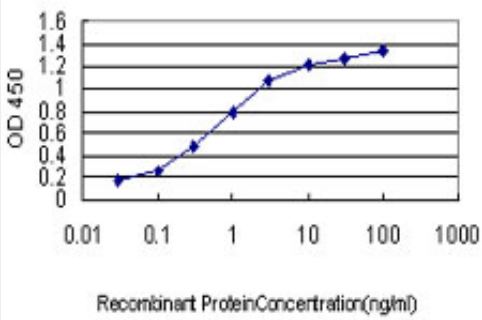
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture



Western Blot analysis of NDRG2 expression in transfected 293T cell line by NDRG2 monoclonal antibody (M03), clone 6A5.

Lane 1: NDRG2 transfected lysate(39.7 KDa).
Lane 2: Non-transfected lysate.



Detection limit for recombinant GST tagged NDRG2 is approximately 0.03ng/ml as a capture antibody.

NDRG2 Antibody (monoclonal) (M03) - Background

This gene is a member of the N-myc downregulated gene family which belongs to the alpha/beta hydrolase superfamily. The protein encoded by this gene is a cytoplasmic protein that may play a role in neurite outgrowth. This gene may be involved in glioblastoma carcinogenesis. Several alternatively spliced transcript variants of this gene have been described, but the full-length nature of some of these variants has not been determined.

NDRG2 Antibody (monoclonal) (M03) - References

1.N-myc downstream-regulated gene 2 expression is associated with glucose transport and correlated with prognosis in breast carcinoma.Ma J, Liu W, Guo H, Li S, Cao W, Du X, Lei S, Hou W, Xiong L, Yao L, Li N, Li YBreast Cancer Res. 2014 Mar 18;16(2):R27.2.Tumor suppressor NDRG2 tips the balance of oncogenic TGF-β via EMT inhibition in colorectal cancer.Shen L, Qu X, Ma Y, Zheng J, Chu D, Liu B, Li X, Wang M, Xu C, Liu N, Yao L, Zhang JOncogenesis. 2014 Feb 3;3:e86. doi: 10.1038/oncsis.2013.48.3.Regulation of N-Myc downstream regulated gene 2 by bile acids.Langhi C, Pedraz-Cuesta E, Donate Y, Marrero PF, Haro D, Rodriguez JCBiochem Biophys Res Commun. 2013 Mar 27. pii: S0006-291X(13)00512-3. doi: 10.1016/j.bbrc.2013.03.058.4.NDRG2: a newly identified mediator of insulin cardioprotection against myocardial ischemia-reperfusion injury.Sun Z, Tong G, Ma N, Li J, Li X, Li S, Zhou J, Xiong L, Cao F, Yao L, Wang H, Shen LBasic Res Cardiol. 2013 May;108(3):341. doi: 10.1007/s00395-013-0341-5. Epub 2013 Mar 6.5.NDRG2 Is a Novel p53-Associated Regulator of Apoptosis in C6-Originated Astrocytes Exposed to Oxygen-Glucose Deprivation.Li Y, Xu N, Cai L, Gao Z, Shen L, Zhang Q, Hou W, Zhong H, Wang Q, Xiong LPLoS One. 2013;8(2):e57130. doi: 10.1371/journal.pone.0057130. Epub 2013 Feb 22.6.NDRG2 correlated with favorable recurrence-free survival inhibits metastasis of mouse breast cancer cells via attenuation of active TGF-?] production.Kim KD, Oh SS, Kim D, Kim DH, Chang HH, Sohn KC, Kim KH, Jung S, Lee BK, Kim JH.Carcinogenesis. 2012 Jun 13.7.Microarray profiling of HepG2 cells ectopically expressing NDRG2.Liu X, Niu T, Liu X, Hou W, Zhang J, Yao L.Gene. 2012 Apr 25.8.NDRG2 down-regulation and CD24 up-regulation promote tumor aggravation and poor survival in patients with gallbladder carcinoma.Song SP, Zhang SB, Liu R, Yao L, Hao YQ, Liao MM, Zhang YD, Li ZH.Med Oncol. 2011 Dec 2.9.Up-regulation of NDRG2 through nuclear factor-kappa B is required for Leydig cell apoptosis in both human and murine infertile testes.Li T, Hu J, He GH, Li Y, Zhu CC, Hou WH, Zhang S, Li W, Zhang JS, Wang Z, Liu XP, Yao LB, Zhang YQ.Biochim Biophys Acta. 2011 Nov 22.10.NDRG2 Ameliorates Hepatic Fibrosis by Inhibiting the TGF-beta 1/Smad Pathway and Altering the MMP2/TIMP2 Ratio in Rats.Yang J, Zheng J, Wu L, Shi M, Zhang H,

Wang X, Xia N, Wang D, Liu X, Yao L, Li Y, Dou K.PLoS One. 2011;6(11):e27710. Epub 2011 Nov 16.11.Regulation of histone acetylation by NDRG2 in glioma cells.Li L, Qin X, Shi M, Miao R, Wang L, Liu X, Yao L, Deng Y.J Neurooncol. 2011 Sep 13.12.NDRG2 inhibits hepatocellular carcinoma adhesion, migration and invasion by regulating CD24 expression.Zheng J, Li Y, Yang J, Liu Q, Shi M, Zhang R, Shi H, Ren Q, Ma J, Guo H, Tao Y, Xue Y, Jiang N, Yao L, Liu W.BMC Cancer. 2011 Jun 16;11:251.13.Spatial-temporal expression of NDRG2 in rat brain after focal cerebral ischemia and reperfusion.Li Y, Shen L, Cai L, Wang Q, Hou W, Wang F, Zeng Y, Zhao G, Yao L, Xiong L.Brain Res. 2011 Jan 15. [Epub ahead of print]14.Variation of NDRG2 and c-Myc expression in rat heart during the acute stage of ischemia/reperfusion injury.Sun Z, Shen L, Sun X, Tong G, Sun D, Han T, Yang G, Zhang J, Cao F, Yao L, Wang H.Histochem Cell Biol. 2011 Jan;135(1):27-35. Epub 2010 Dec 31.15.NDRG2 is highly expressed in pancreatic beta cells and involved in protection against lipotoxicity.Shen L, Liu X, Hou W, Yang G, Wu Y, Zhang R, Li X, Che H, Lu Z, Zhang Y, Liu X, Yao L.Cell Mol Life Sci. 2010 Feb 3. [Epub ahead of print]16.Immunohistochemical detection of Ndrg2 in the mouse nervous system.Shen L, Zhao ZY, Wang YZ, Ji SP, Liu XP, Liu XW, Che HL, Lin W, Li X, Zhang J, Yao LB.Neuroreport. 2008 Jun 11;19(9):927-31.