

Product Datasheet

GCLC Antibody (3H1) - Azide and BSA Free H00002729-M01

Unit Size: 0.1 mg

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

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H00002729-M01

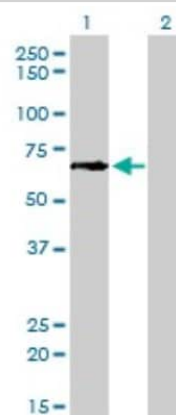
GCLC Antibody (3H1) - Azide and BSA Free

Product Information	
Unit Size	0.1 mg
Concentration	Concentrations vary lot to lot. See vial label for concentration. If unlisted please contact technical services.
Storage	Aliquot and store at -20C or -80C. Avoid freeze-thaw cycles.
Clonality	Monoclonal
Clone	3H1
Preservative	No Preservative
Isotype	IgG1 Kappa
Purity	IgG purified
Buffer	In 1x PBS, pH 7.4
Product Description	
Description	Quality control test: Antibody Reactive Against Recombinant Protein.
Host	Mouse
Gene ID	2729
Gene Symbol	GCLC
Species	Human, Mouse, Rat
Reactivity Notes	Please note that this antibody is reactive to Mouse and derived from the same host, Mouse. Additional Mouse on Mouse blocking steps may be required for IHC and ICC experiments. Please contact Technical Support for more information.
Specificity/Sensitivity	GCLC - glutamate-cysteine ligase, catalytic subunit
Immunogen	GCLC (NP_001489, 528 a.a. ~ 637 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa. EGVFPGILIPILNSYLENMEVDVDTRCSILNYLKLIIKKRASGELMTVARWMREFIA NHPDYKQDSVITDEMNYSLILKCNQIANELCECPELLGSAFRKVKYSGSKTDSS N
Notes	This product is produced by and distributed for Abnova, a company based in Taiwan.
Product Application Details	
Applications	Western Blot, ELISA, Immunocytochemistry/ Immunofluorescence
Recommended Dilutions	Western Blot 1:500, ELISA, Immunocytochemistry/ Immunofluorescence 1:10-1:500
Application Notes	Antibody reactivity against cell lysate and recombinant protein for WB. It has also been used for IF and ELISA.

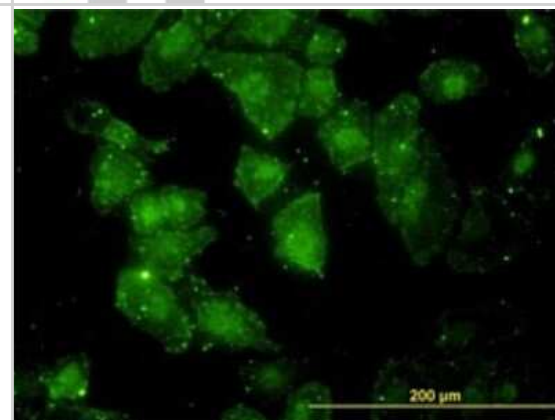


Images

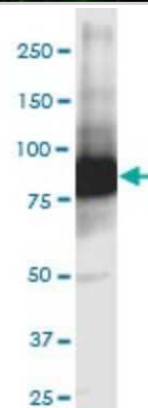
Western Blot: GCLC Antibody (3H1) [H00002729-M01] - Analysis of GCLC expression in transfected 293T cell line by GCLC monoclonal antibody (M01), clone 3H1. Lane 1: GCLC transfected lysate(72.8 KDa). Lane 2: Non-transfected lysate.



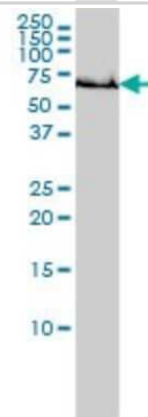
Immunocytochemistry/Immunofluorescence: GCLC Antibody (3H1) [H00002729-M01] - Analysis of monoclonal antibody to GCLC on HeLa cell. Antibody concentration 10 ug/ml.



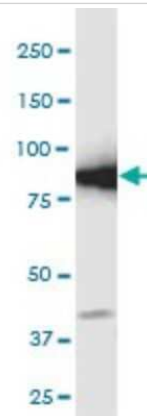
Western Blot: GCLC Antibody (3H1) [H00002729-M01] - GCLC monoclonal antibody (M01), clone 3H1. Analysis of GCLC expression in PC-12.



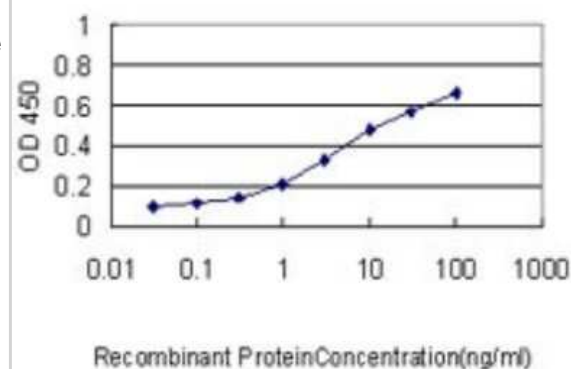
Western Blot: GCLC Antibody (3H1) [H00002729-M01] - GCLC monoclonal antibody (M01), clone 3H1. Analysis of GCLC expression in A-431.



Western Blot: GCLC Antibody (3H1) [H00002729-M01] - GCLC monoclonal antibody (M01), clone 3H1. Analysis of GCLC expression in NIH/3T3.



ELISA: GCLC Antibody (3H1) [H00002729-M01] - Detection limit for recombinant GST tagged GCLC is approximately 0.03ng/ml as a capture antibody.



Publications

Beatty A, Fink LS, Singh T et al. Metabolite Profiling Reveals the Glutathione Biosynthetic Pathway as a Therapeutic Target in Triple-Negative Breast Cancer Molecular Cancer Therapeutics 2018-01-01 [PMID: 29021292]

Deka B, Sarma P, Manna P et al. Alliin Enriched Standardized Fraction of Allium Hookeri Regulates the Glucose Homeostasis Via Upregulating Hepatic Glutathione Pool SSRN Electronic Journal 2023-02-17 (WB, Rat)

Stewart A, Glaser E, Bailey WM, Gensel J Immunoglobulin G is Increased in the Injured Spinal Cord in a Sex and Age Dependent Manner Journal of neurotrauma 2022-04-04 [PMID: 35373588] (WB, Mouse)

Stewart A, Glaser E, Mott CA et al. Advanced Age and Neurotrauma Diminish Glutathione and Impair Antioxidant Defense after Spinal Cord Injury Journal of neurotrauma 2022-04-04 [PMID: 35373589] (WB, Mouse)

Insulin-like growth factor 1 specifically up-regulates expression of modifier subunit of glutamate-cysteine ligase and enhances glutathione synthesis in SH-SY5Y cells. Takahashi S, Hisatsune A, Kurauchi Y et al. Eur J Pharmacol [PMID: 26687633] (WB, Human)

Kim DH, Jang JH, Kwon OS et al. Nrf2-induced reductive stress favours self-renewal of breast cancer stem-like cells via the FoxO3a-Bmi-1 axis Antioxid. Redox Signal. 2019-11-01 [PMID: 31672029]

Takahashi S, Hisatsune A, Kurauchi Y et al. Polysulfide protects midbrain dopaminergic neurons from MPP+-induced degeneration via enhancement of glutathione biosynthesis. J Pharmacol Sci 2018-04-20 [PMID: 29709269]

Yang Heping, Ramani Komal, Xia Meng et al. Dysregulation of glutathione synthesis during cholestasis in mice: molecular mechanisms and therapeutic implications. Hepatology (Baltimore, Md.) 2009-01-01 [PMID: 19399914] (WB, Mouse)

Abel EL, Bubel JD, Simper MS et al. Protection against 2-chloroethyl ethyl sulfide (CEES) - Induced cytotoxicity in human keratinocytes by an inducer of the glutathione detoxification pathway. Toxicol Appl Pharmacol. 2011-06-23 [PMID: 21723306]

Li M, Gunter ME, Fukagawa NK. Differential activation of the inflammasome in THP-1 cells exposed to chrysotile asbestos and Libby 'six-mix' amphiboles and subsequent activation of BEAS-2B cells. Cytokine. 2012-09-24 [PMID: 23017228]

Fan X, Liu X, Hao S et al. The LEGSKO Mouse: A Mouse Model of Age-Related Nuclear Cataract Based on Genetic Suppression of Lens Glutathione Synthesis. PLoS One. 2012-11-30 [PMID: 23226398]

Sugiyama K, Ebinuma H, Nakamoto N et al. Prominent steatosis with hypermetabolism of the cell line permissive for years of infection with hepatitis C virus. PLoS One. 2014-04-09 [PMID: 24718268]

More publications at <http://www.novusbio.com/H00002729-M01>





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Products Related to H00002729-M01

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)
H00002729-P01-10ug	Recombinant Human GCLC GST (N-Term) Protein

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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