Product Datasheet

Cytochrome c Antibody (7H8.2C12) [Biotin]
NB100-55775

Unit Size: 0.1 ml

Store at 4C. Do not freeze.

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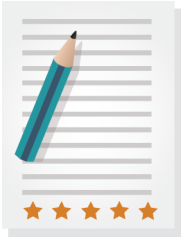
Updated 10/23/2024 v.20.1



NB100-55775

Cytochrome c Antibody (7H8.2C12) [Biotin]

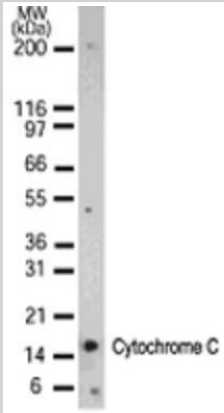
Product Information	
Unit Size	0.1 ml
Concentration	Please see the vial label for concentration. If unlisted please contact technical services.
Storage	Store at 4C. Do not freeze.
Clonality	Monoclonal
Clone	7H8.2C12
Preservative	0.05% Sodium Azide
Isotype	IgG2b Kappa
Conjugate	Biotin
Purity	Protein G purified
Buffer	PBS

Product Description	
Host	Mouse
Gene ID	54205
Gene Symbol	CYCS
Species	Human, Mouse, Rat, Drosophila, Rabbit
Marker	Mitochondria Marker
Specificity/Sensitivity	An approx. 15 kDa band is observed. This antibody recognizes total cytochrome C which includes both apocytochrome (i.e. cytochrome in the cytosol without heme attached) and holocytochrome (i.e cytochrome in the mitochondria with heme attached).
Immunogen	Synthetic peptides corresponding to amino acids 1-80, 81-104 and 66-104 of pigeon CYT were used as the immunogen (Jemmerson et al. 1991). The antibody recognizes an epitope within amino acids 93-104 of pigeon cytochrome C based on competitive ELISA results (Jemmerson et al. 1991).

Product Application Details	
Applications	Western Blot, Flow (Intracellular), Immunocytochemistry/ Immunofluorescence, Immunohistochemistry, Immunohistochemistry-Frozen
Recommended Dilutions	Western Blot 0.05-0.5 ug/ml, Immunohistochemistry, Immunocytochemistry/ Immunofluorescence, Immunohistochemistry-Frozen 1:10-1:500, Flow (Intracellular)
Application Notes	Optimal dilution of this antibody should be experimentally determined.

Images

Western Blot: Cytochrome C Antibody (7H8.2C12) [Biotin] [NB100-55775] - Western blot detection of Cytochrome C in 15 mgs of HeLa cell lysate using NB100-55775 at 1:1000. A 15 kDa band is detected.



Publications

Chen M, Gan H, Remold HG. A mechanism of virulence: virulent Mycobacterium tuberculosis strain H37Rv, but not attenuated H37Ra, causes significant mitochondrial inner membrane disruption in macrophages leading to necrosis. J Immunol. 2006-03-15 [PMID: 16517739] (Flow Cytometry Control, Human)

Details:
IHC (paraffin), Figs. 2-6: 1. IMH-326 [Common Cancers, (A):(59 samples)].

Yamasaki E, Wada A, Kumatori A et al. Helicobacter pylori vacuolating cytotoxin induces activation of the proapoptotic proteins Bax and Bak, leading to cytochrome c release and cell death, independent of vacuolation. J Biol Chem. 2006-04-21 [PMID: 16436379]

Details:
Cytochrome C (IMG-101A). IF/ICC: Gastric epithelial (AZ-521) cell line treated with Helicobacter pylori vacuolating cytotoxin (VacA), Fig 6.

Colell A, Garcia-Ruiz C, Lluis JM et al. Cholesterol impairs the adenine nucleotide translocator-mediated mitochondrial permeability transition through altered membrane fluidity J Biol Chem 2003-01-01 [PMID: 12821666] (WB, Rat)

Details:
This citation used the Biotin version of this antibody.

Boden G, Homko C, Mozzoli M et al. Thiazolidinediones upregulate fatty acid uptake and oxidation in adipose tissue of diabetic patients. Diabetes. 2005-03-01 [PMID: 15734868]

Details:
Cytochrome C [WB, Fig.2 (HCS cells)].

Douglas RM, Ryu J, Kanaan A et al. Neuronal death during combined intermittent hypoxia/hypercapnia is due to mitochondrial dysfunction. Am J Physiol Cell Physiol. 2010-06-01 [PMID: 20357179] (ICC/IF, Mouse)

Details:
IF (frozen): mouse brain cryosections, Fig 2A.

Datta R, Oki E, Endo K et al. XIAP regulates DNA damage-induced apoptosis downstream of caspase-9 cleavage. J Biol Chem. 2000-10-13 [PMID: 10930419] (WB)

Details:
Cytochrome C (IMG-101A). WB: U-937 cells stably overexpressing XIAP treated with arabinofuranosyl cytosine (ara-C), Fig 2.

Walczak H, Bouchon A, Stahl H, Krammer PH. Tumor necrosis factor-related apoptosis-inducing ligand retains its apoptosis-inducing capacity on Bcl-2- or Bcl-xL-overexpressing chemotherapy-resistant tumor cells. Cancer Res. 2000-06-01 [PMID: 10850456]

Kamal A, Sreekanth K, Kumar PP et al. Synthesis and potential cytotoxic activity of new phenanthrylphenol-pyrrolobenzodiazepines. Eur J Med Chem. 2010-06-01 [PMID: 20171761]

Details:
Products cited for western blot: 1. PARP (IMG-401A): MCF-7 cells treated with numerous compounds, Fig 7. 2. B-Tubulin (IMG-5180A): MCF-7 cells treated with PP-PBDs, Fig 6 and Fig 7. 3. Cytochrome C (IMG-101A): MCF-7 cells treated with numerous compounds,

Shen HM, Yang CF, Ding WX et al. Superoxide radical-initiated apoptotic signalling pathway in selenite-treated HepG (2) cells: mitochondria serve as the main target. Free Radic Biol Med. 2001-01-01 [PMID: 11134891] (WB)

Details:
Cytochrome C (IMG-101A). WB: Mitochondrial fraction from selenite induced HepG2 cell line, Fig 3A.

Narvaez CJ, Welsh J. Role of mitochondria and caspases in vitamin D-mediated apoptosis of MCF-7 breast cancer cells. J Biol Chem. 2001-03-23 [PMID: 11053435] (WB)

Details:
Cytochrome C (IMG-101A). WB: MCF-7 cell line treated with z-VAD or TNF alpha, Fig 7A.

Arnoult D, Grodet A, Lee YJ et al. Release of OPA1 during apoptosis participates in the rapid and complete release of cytochrome c and subsequent mitochondrial fragmentation. J Biol Chem. 2005-10-21 [PMID: 16115883]

Details:
Cytochrome C (IMG-101A). WB: HeLa or HeLa cells stably overexpressing Bcl-2 treated with staurosporine (STS) or actinomycin D (ActD), Fig 2.

Pervaiz S, Seyed MA, Hirpara JL et al. Purified photoproducts of merocyanine 540 trigger cytochrome C release and caspase 8-dependent apoptosis in human leukemia and melanoma cells. Blood. 1999-06-15 [PMID: 10361106]

Details:
Cytochrome C (IMG-101A) WB: Rat mitochondrial cells were treated with C1 or C2 and cytosolic fractions were subjected to electrophoresis. Fig 5 & 7. Anti-apoptotic effect cGMP is cultured astrocytes.

More publications at http://www.novusbio.com/NB100-55775

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NBP2-29370	Streptavidin Native Protein
NBL1-09662	Cytochrome c Overexpression Lysate
NBP1-43317B	Mouse IgG2b Kappa Light Chain Isotype Control (MG2b) [Biotin]
NB100-56503PE	Cytochrome c Antibody (7H8.2C12) [PE]

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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