For Research Use Only

Cytochrome c Monoclonal antibody

Catalog Number:66264-1-Ig Featured Product 120 Publications

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Basic Information

Catalog Number:
66264-1-Ig

Size:
150ul , Concentration: 1828 ug/ml by Nanodrop and 1000 ug/ml by Bradford method using BSA as the standard;

Source:
Mouse

Isotype:
IgG2a

Immunogen Catalog Number:
AG24349

GenBank Accession Number:
BC009578

GeneID (NCBI):
54205

UNIPROT ID:
P99999

Full Name:
cytochrome c, somatic

Calculated MW:
12 kDa

Observed MW:
12-15 kDa

Purification Method:
Protein A purification

CloneNo.:
2D8D11

Recommended Dilutions:
WB 1:5000-1:50000
IHC 1:1000-1:5000
IF/ICC 1:200-1:800

Applications

Tested Applications:
WB, IHC, IF/ICC, FC (Intra), ELISA

Cited Applications:
WB, IHC, IF

Species Specificity:
human, mouse, rat

Cited Species:
human, mouse, rat, canine

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0

Positive Controls:

WB : HeLa cells, human heart tissue, human skeletal muscle tissue, rat skeletal muscle tissue, mouse skeletal muscle tissue, HEK-293 cells, HepG2 cells, MCF-7 cells, Jurkat cells, HSC-T6 cells, ROS1728 cells, RAW 264.7 cells

IHC : human liver cancer tissue, human breast cancer tissue

IF/ICC : HepG2 cells,

Background Information

Cytochrome c is a 12-15 kDa electron transporting protein located in the inner mitochondrial membrane. Upon apoptotic stimulation, cytochrome c can be released from mitochondria into cytoplasm, resulting in caspase-3 activation and apoptosis. Measurement of cytochrome c release from the mitochondria is useful for detection of the onset of apoptosis in cells. In addition, cytochrome c can also leave cells and be detectable in extra-cellular medium of apoptotic cells and serum of cancer patients. The level of serum cytochrome c may serve as a prognostic maker during cancer therapy.

Notable Publications

Author	Pubmed ID	Journal	Application
Xudong Yao	30273654	Pharmacol Res	WB
Zi-Chao Wang	36163178	Cell Death Dis	WB
Na Jiang	32975326	Cell Prolif	WB

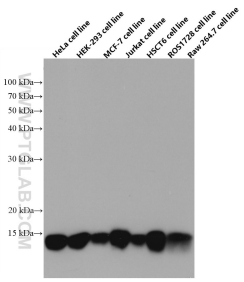
Storage

Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol, pH7.3
Aliquoting is unnecessary for -20°C storage

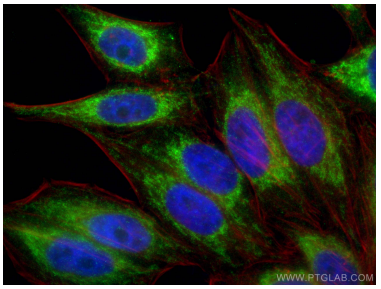
*** 20ul sizes contain 0.1% BSA

For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
E: proteintech@ptglab.com
W: ptglab.com

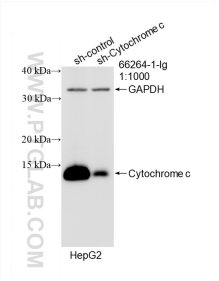
Selected Validation Data



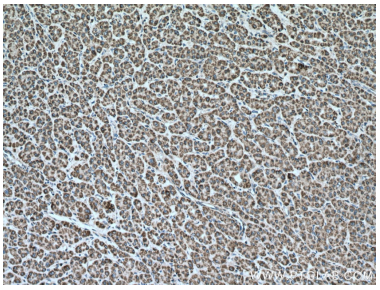
Various cells were subjected to SDS PAGE followed by western blot with 66264-1-Ig (Cytochrome c antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours.



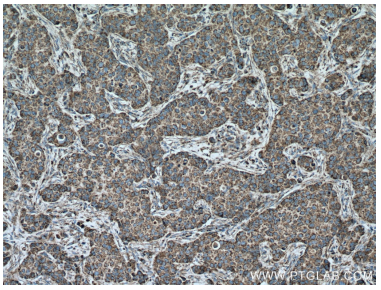
Immunofluorescent analysis of (4% PFA) fixed HepG2 cells using Cytochrome c antibody (66264-1-Ig, Clone: 2D8D11) at dilution of 1:400 and CoraLite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L) (SA00013-1), CL594-phalloidin (red).



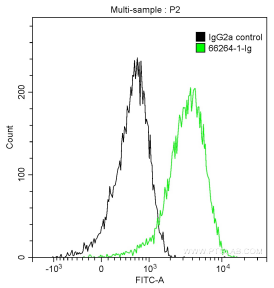
WB result of Cytochrome c antibody (66264-1-Ig; 1:1000; incubated at room temperature for 1.5 hours) with sh-Control and sh-Cytochrome c transfected HepG2 cells.



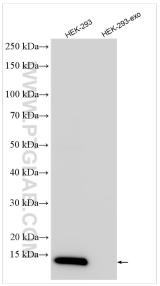
Immunohistochemical analysis of paraffin-embedded human liver cancer tissue slide using 66264-1-Ig (Cytochrome c antibody) at dilution of 1:2000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human breast cancer tissue slide using 66264-1-Ig (Cytochrome c antibody) at dilution of 1:5000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



1X10^6 HepG2 cells were intracellularly stained with 0.2 ug Anti-Human Cytochrome c (66264-1-Ig, Clone:2D8D11) and CoraLite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L) at dilution 1:1000 (green), and 0.2 ug Mouse IgG2a Isotype Control (66360-2-Ig, Clone: K11A1B2A2) (black). Cells were fixed with 4% PFA and permeabilized with 0.1% TritonX-100.



HEK-293 cells and HEK-293-derived exosomes (HEK-293-exo) were subjected to SDS PAGE followed by western blot with 66264-1-Ig (Cytochrome c antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours.