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Cytochrome C Monoclonal Mouse Antibody (6H2.B4)

Product Description

Cytochrome c is a well-characterized mobile electron transport protein that is essential to energy conversion in all aerobic organisms. In mammalian cells, this highly conserved protein is normally localized to the mitochondrial inter-membrane space. More recent studies have identified cytosolic cytochrome c as a factor necessary for activation of apoptosis. During apoptosis, cytochrome c is trans-located from the mitochondrial membrane to the cytosol, where it is required for activation of caspase-3 (CPP32). Overexpression of Bcl-2 has been shown to prevent the translocation of cytochrome c, thereby blocking the apoptotic process. Overexpression of Bax has been shown to induce the release of cytochrome c and to induce cell death. The release of cytochrome c from the mitochondria is thought to trigger an apoptotic cascade, whereby Apaf-1 binds to Apaf-3 (caspase-9) in a cytochrome c-dependent manner, leading to caspase-9 cleavage of caspase-3.

Product attributes

Antibody number	#0184
Antibody reactivity (target)	Cytochrome c
Antibody type	Primary
Host species	Mouse
Clonality	Monoclonal
Clone	6H2.B4
Isotype	IgG1, kappa
Molecular weight	15 kDa
Synonyms	CYC; CYCS; HCS; THC4
Human gene symbol	CYCS
Entrez gene ID	54205
SwissProt	P99999
Unigene	437060
Immunogen	Rat full-length cytochrome c protein
Verified antibody applications	Flow (intracellular) (verified), IF (verified)
Antibody target cellular localization	Mitochondria
Species reactivity	Human, Mouse, Rat
Antibody application notes	Higher concentration may be required for direct detection using primary antibody conjugates than for indirect detection with secondary antibody, Flow cytometry: 0.5-1 ug/million cells, Immunofluorescence: 0.5-1 ug/mL, Optimal dilution for a specific application should be determined by user
Positive control	K-562, HL-60, Jurkat, NIH3T3 or PC-3 cells. Liver or Cardiac muscle.
Shipping condition	Room temperature
Storage Conditions	Store at 2 to 8 °C, Protect fluorescent conjugates from light, Note: store BSA-free antibodies at -10 to -35 °C
Regulatory status	For research use only (RUO)
Antibody/conjugate formulation	Conjugates: 0.1 mg/mL in PBS/0.1% BSA/0.05% azide, HRP conjugates: 0.1 mg/mL in PBS/0.05% BSA, Purified: 0.2 mg/mL in PBS/0.05% BSA/0.05% azide, Purified, BSA-free: 1 mg/mL in PBS without azide
Shelf life	Guaranteed for at least 24 months from date of receipt when stored as recommended
Antibody research areas	Apoptosis