

## Cytochrome C Antibody [clone CTC05] (V2788)

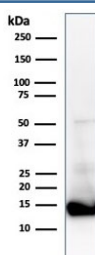
Catalog No.	Formulation	Size
V2788-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V2788-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V2788SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug
V2788IHC-7ML	Prediluted in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide; *For IHC use only*	7 ml



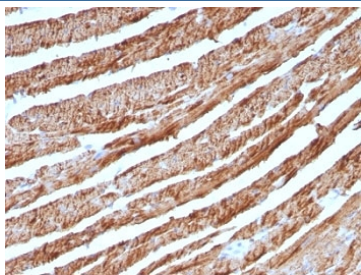
Citations (1)

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Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG2b, kappa
Clone Name	CTC05
Purity	Protein G affinity chromatography
UniProt	P99999
Localization	Cytoplasmic
Applications	Western Blot : 1-2ug/ml Immunohistochemistry (FFPE) : 0.25-0.5ug/ml for 30 min at RT
Limitations	This Cytochrome C antibody is available for research use only.



Western blot testing of human heart lysate with Cytochrome C antibody (clone CTC05).  
Predicted molecular weight: ~12 kDa, routinely visualized at ~15 kDa.



IHC staining of FFPE human heart with Cytochrome C antibody (clone CTC05). HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 20 min and allow to cool before testing.

## 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.

## Application Notes

Optimal dilution of the Cytochrome C antibody should be determined by the researcher.

1. Staining of formalin-fixed tissues requires boiling tissue sections in pH 9 10mM Tris with 1mM EDTA for 10-20 min followed by cooling at RT for 20 min
2. The prediluted format is supplied in a dropper bottle and is optimized for use in IHC. After epitope retrieval step (if required), drip mAb solution onto the tissue section and incubate at RT for 30 min.

## Immunogen

Recombinant protein was used as the immunogen for the Cytochrome C antibody.

## Storage

Store the Cytochrome C antibody at 2-8oC (with azide) or aliquot and store at -20oC or colder (without azide).