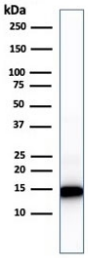
Cytochrome C Antibody [clone 7H8.2C12] (V2786)

Catalog No.	Formulation	Size
V2786-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V2786-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V2786SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug
V2786IHC-7ML	Prediluted in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide; *For IHC use only*	7 ml

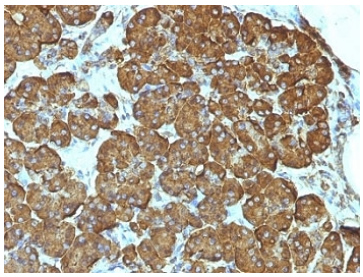
Citations (11)

Bulk quote request

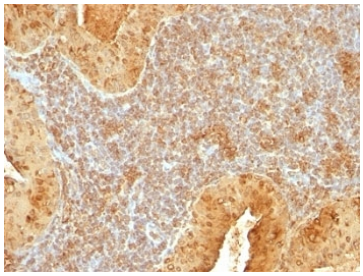
Availability	1-3 business days
Species Reactivity	Human, Mouse, Rat
Format	Purified
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG2b, kappa
Clone Name	7H8.2C12
Purity	Protein G affinity chromatography
UniProt	P99999
Localization	Cytoplasmic
Applications	Western Blot : 1-2ug/ml Immunohistochemistry (FFPE) : 1-2ug/ml for 30 min at RT
Limitations	This Cytochrome C antibody is available for research use only.



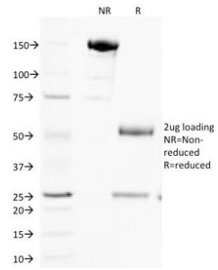
Western blot testing of human heart lysate with Cytochrome C antibody (clone 7H8.2C12). Predicted molecular weight: ~12 kDa, routinely visualized at ~15 kDa.



IHC analysis of formalin-fixed, paraffin-embedded human pancreas stained with Cytochrome C antibody (clone 7H8.2C12).



IHC analysis of formalin-fixed, paraffin-embedded human salivary tumor stained with Cytochrome C antibody (clone 7H8.2C12).



SDS-PAGE analysis of purified, BSA-free Cytochrome C antibody (clone 7H8.2C12) as confirmation of integrity and purity.

Description

It recognizes an epitope within amino acids 93-104 of pigeon Cytochrome C, 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. This mAb 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).

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

Synthetic peptides corresponding to amino acid 1-80, 81-104 and 66-104 of pigeon Cytochrome C 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).