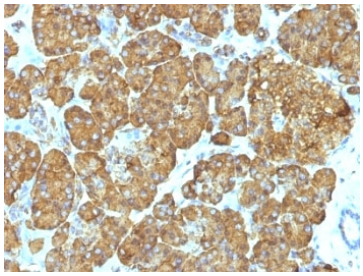
# Cytochrome C Antibody Cocktail [clone 7H8.2C12 + CYCS/1010] (V2790)

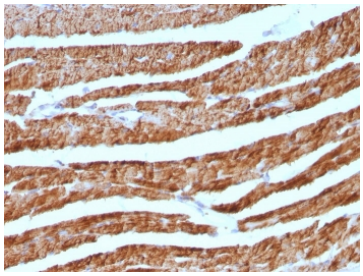
| Catalog No. | Formulation | Size |
|---|---|---|
| V2790-100UG | 0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide | 100 ug |
| V2790-20UG | 0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide | 20 ug |
| V2790SAF-100UG | 1 mg/ml in 1X PBS; BSA free, sodium azide free | 100 ug |
| V2790IHC-7ML | Prediluted in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide; *For IHC use only* | 7 ml |

**Bulk quote request**

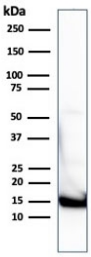
| | |
|---|---|
| **Availability** | 1-3 business days |
| **Species Reactivity** | Human |
| **Format** | Purified |
| **Host** | Mouse |
| **Clonality** | Monoclonal (mouse origin) |
| **Isotype** | Mouse IgG2b, kappa |
| **Clone Name** | 7H8.2C12 + CYCS/1010 |
| **Purity** | Protein G affinity chromatography |
| **UniProt** | P99999 |
| **Localization** | Cytoplasmic |
| **Applications** | Western Blot : 1-2ug/ml<br>Immunohistochemistry (FFPE) : 0.25-0.5ug/ml for 30 min at RT |
| **Limitations** | This Cytochrome C antibody cocktail is available for research use only. |



IHC: Formalin-fixed, paraffin-embedded human pancreas stained with Cytochrome C antibody cocktail (clones 7H8.2C12 + CYCS/1010).



IHC: Formalin-fixed, paraffin-embedded human heart stained with Cytochrome C antibody cocktail (clones 7H8.2C12 + CYCS/1010).




Western blot testing of human heart lysate with Cytochrome C antibody cocktail (clones 7H8.2C12 + CYCS/1010). Predicted molecular weight: ~12 kDa, routinely visualized at ~15 kDa.

## 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. 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 cocktail 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 (7H8.2C12) and recombinant human protein (CYCS/1010) were used as the immunogen for the Cytochrome C antibody cocktail.

## Storage

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