

## 36-1561: Monoclonal Antibody to Cytochrome C (Mitochondrial Marker)(Clone : 7H8.2C12)

Clonality :	Monoclonal
Clone Name :	7H8.2C12
Application :	WB,IHC
Reactivity :	Human, Mouse, Rat
Gene :	CYCS
Gene ID :	54205
Uniprot ID :	P99999
Format :	Purified
Alternative Name :	CYCS,CYC
Isotype :	Mouse IgG2b, kappa
Immunogen Information	: Synthetic peptides corresponding to amino acid 1-80, 81-104 and 66-104 of pigeon cytochrome c

## **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).

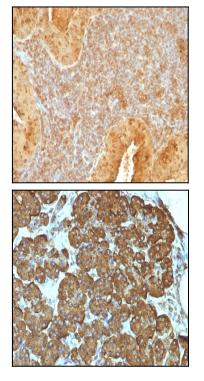
## **Product Info**

Amount :	100 µg
Purification :	Affinity Chromatography
Content :	100 $\mu g$ in 500 $\mu l$ PBS containing 0.05% BSA and 0.05% sodium azide. Sodium azide is highly toxic.
Storage condition :	Store the antibody at 4°C; stable for 6 months. For long-term storage; store at -20°C. Avoid repeated freeze and thaw cycles.

## **Application Note**

Western Blot (1-2ug/ml);,Immunohistochemistry (Formalin-fixed) (1-2ug/ml for 30 minutes at RT),(Staining of formalin-fixed tissues requires heating tissue sections in 10mM Tris with 1mM EDTA, pH 9.0, for 45 min at 95 &degC followed by cooling at RT for 20 minutes),





Formalin-fixed, paraffin-embedded human Salivary Tumor stained with Cytochrome C Monoclonal Antibody (7H8.2C12).

Formalin-fixed, paraffin-embedded human Pancreas stained with Cytochrome C Monoclonal Antibody (7H8.2C12).