

### 36-1562: Monoclonal Antibody to Cytochrome C (Mitochondrial Marker)(Clone : SPM389)

<b>Clonality :</b>	Monoclonal
<b>Clone Name :</b>	SPM389
<b>Application :</b>	WB,IHC
<b>Reactivity :</b>	Human, Mouse, Rat
<b>Gene :</b>	CYCS
<b>Gene ID :</b>	54205
<b>Uniprot ID :</b>	P99999
<b>Format :</b>	Purified
<b>Alternative Name :</b>	CYCS,CYC
<b>Isotype :</b>	Mouse IgG2b, kappa
<b>Immunogen Information :</b>	Synthetic peptides corresponding to amino acid 1-80, 81-104 and 66-104 of pigeon cytochrome c

#### Description

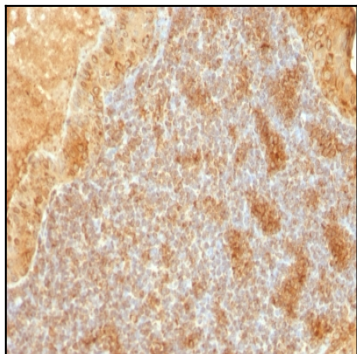
It recognizes an epitope within amino acids 93-104 of pigeon Cytochrome C, a well-characterized mobile electron transport protein that is essential to energy conversion in all aerobic organisms. In mammalian cells, this highly conserved protein is normally localized to the mitochondrial inter-membrane 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

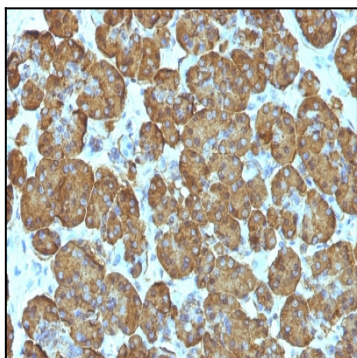
<b>Amount :</b>	100 µg
<b>Purification :</b>	Affinity Chromatography
<b>Content :</b>	100 µg in 500 µl PBS containing 0.05% BSA and 0.05% sodium azide. Sodium azide is highly toxic.
<b>Storage condition :</b>	Store the antibody at 4°C; stable for 6 months. For long-term storage; store at -20°C. Avoid 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°C followed by cooling at RT for 20 minutes);



Formalin-fixed, paraffin-embedded human Salivary Tumor stained with Cytochrome C Monoclonal Antibody (SPM389).



Formalin-fixed, paraffin-embedded human Pancreas stained with Cytochrome C Monoclonal Antibody (SPM389).