

### 36-1257: Monoclonal Antibody to IDH1 (Isocitrate Dehydrogenase)(Clone : IDH1/1152)

<b>Clonality :</b>	Monoclonal
<b>Clone Name :</b>	IDH1/1152
<b>Application :</b>	FACS,IF,WB,IHC
<b>Reactivity :</b>	Human
<b>Gene :</b>	IDH1
<b>Gene ID :</b>	3417
<b>Uniprot ID :</b>	O75874
<b>Format :</b>	Purified
<b>Alternative Name :</b>	IDH1,PICD
<b>Isotype :</b>	Mouse IgG1, kappa
<b>Immunogen Information :</b>	Recombinant fragment (119 Amino acid residues around aa 280-420) of human IDH1 protein

#### Description

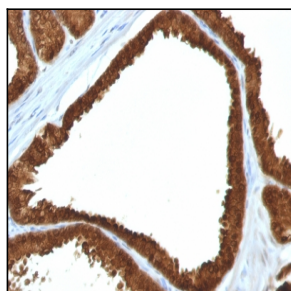
It recognizes a 45kDa protein, which is identified as isocitrate dehydrogenase (IDH1). It belongs to the isocitrate and isopropylmalate dehydrogenases family. IDH1 catalyzes the third step of the citric acid cycle, which involves the oxidative decarboxylation of isocitrate, forming alpha-ketoglutarate and CO<sub>2</sub> in a two-step reaction. The first step involves the oxidation of isocitrate to the intermediate oxalosuccinate, while the second step involves the production of alpha-ketoglutarate. During this process, either NADH or NADPH is produced along with CO<sub>2</sub>. Recently, an inactivating mutation of IDH1 has been implicated in glioblastoma. IDH1 appears to function as a tumor suppressor that, when mutationally inactivated, contributes to tumorigenesis in part through induction of the HIF-1 pathway.

#### Product Info

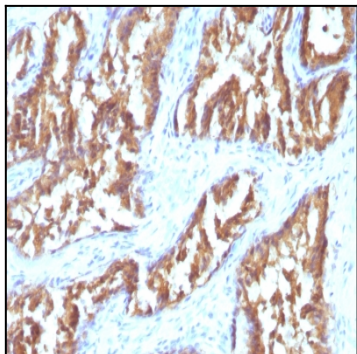
<b>Amount :</b>	100 µg
<b>Purification :</b>	Affinity Chromatography
<b>Content :</b>	100 µg in 500 µl PBS containing 0.05% BSA and 0.05% sodium azide. Sodium azide is highly toxic.
<b>Storage condition :</b>	Store the antibody at 4°C; stable for 6 months. For long-term storage; store at -20°C. Avoid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

#### Application Note

Flow Cytometry (1-2ug/million cells); Immunofluorescence (1-2ug/ml); 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 Colon Carcinoma stained with IDH1 Monoclonal Antibody (IDH1/1152).



Formalin-fixed, paraffin-embedded human Prostate Carcinoma stained with IDH1 Monoclonal Antibody (IDH1/1152).