

## Basic Information

<b>Product Name</b>	Anti-IDH2 Antibody (Clone#ACFO-9)		
<b>Gene Name</b>	IDH2		
<b>Source</b>	Rabbit		
<b>Clonality</b>	Monoclonal		
<b>Isotype</b>	IgG		
<b>Species Reactivity</b>	human, mouse, rat		
<b>Tested Application</b>	WB, IHC, FCM		
<b>Contents</b>	500 ug/ml; Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide, 0.4-0.5 mg/ml BSA and 50% glycerol.		
<b>Immunogen</b>	A synthesized peptide derived from human IDH2 Plays a role in intermediary metabolism and energy production. It may tightly associate or interact with the pyruvate dehydrogenase complex.		
<b>Concentration</b>	500 ug/ml		
<b>Purification</b>	Affinity-chromatography		
<b>Observed MW</b>	45 kDa		
<b>Dilution Ratios</b>	Western blot (WB): 1:500-2000 Immunohistochemistry (IHC):1:50-200 Flow Cytometry (FCM): 1:20		

## Storage

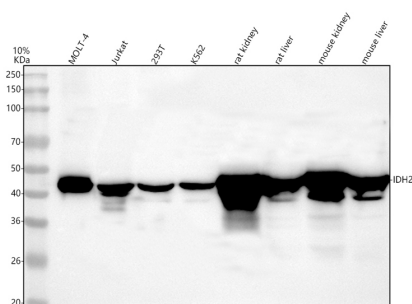
12 months from date of receipt, -20°C as supplied. 6 months 2 to 8°C after reconstitution. Avoid repeated freezing and thawing.

## Background Information

Isocitrate dehydrogenase [NADP], mitochondrial is an enzyme that in humans is encoded by the IDH2 gene. Isocitrate dehydrogenases catalyze the oxidative decarboxylation of isocitrate to 2-oxoglutarate. These enzymes belong to two distinct subclasses, one of which utilizes NAD(+) as the electron acceptor and the other NADP(+). Five isocitrate dehydrogenases have been reported: three NAD(+)-dependent isocitrate dehydrogenases, which localize to the mitochondrial matrix, and two NADP(+)-dependent isocitrate dehydrogenases, one of which is mitochondrial and the other predominantly cytosolic. Each NADP(+)-dependent isozyme is a homodimer. The protein encoded by this gene is the NADP(+)-dependent isocitrate dehydrogenase found in the mitochondria. It plays a role in intermediary metabolism and energy production. This protein may tightly associate or interact with the pyruvate dehydrogenase complex. Alternative

splicing results in multiple transcript variants.

## Selected Validation Data



Western blot analysis of anti-IDH2 antibody (BM5277). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: human MOLT-4 whole cell lysates,

Lane 2: human Jurkat whole cell lysates,

Lane 3: human 293T whole cell lysates,

Lane 4: human K562 whole cell lysates,

Lane 5: rat kidney tissue lysates,

Lane 6: rat liver tissue lysates,

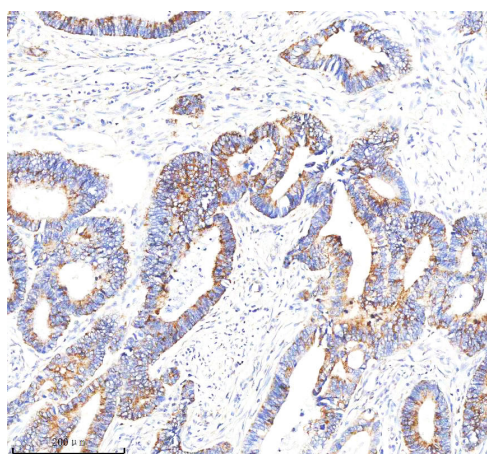
Lane 7: mouse kidney tissue lysates,

Lane 8: mouse liver tissue lysates.

After electrophoresis, proteins were transferred to a membrane.

Then the membrane was incubated with rabbit anti-IDH2 antigen affinity purified monoclonal antibody (BM5277) at a dilution of 1:1000 and probed with a goat anti-rabbit IgG-HRP secondary antibody (Catalog # BA1054). The signal is developed using ECL

Plus Western Blotting Substrate (Catalog # AR1197). A specific band was detected for IDH2 at approximately 45 kDa. The expected band size for IDH2 is at 51 kDa.



IHC analysis of IDH2 using anti-IDH2 antibody (BM5277) .

IDH2 was detected in a paraffin-embedded section of human colon cancer tissue. The tissue section was incubated with rabbit anti-IDH2 Antibody (BM5277) at a dilution of 1:200 and developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Catalog # SV0002) with DAB (Catalog # AR1027) as the chromogen.