Isocitrate Dehydrogenase 2 / IDH2 [clone 6B13] (RQ6222)

Flow cytometry : 1-3ug/million cells

Catalog No.	Formulation	Size
RQ6222	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug
		Bulk quote request
Availability	1-3 business days	
Species Reactivity	Human, Mouse, Rat	
Format	Antigen affinity purified	
Clonality	Monoclonal (mouse origin)	
Isotype	Mouse IgG2a	
Clone Name	6B13	
Purity	Affinity purified	
Buffer	Lyophilized from 1X PBS with 2% Trehalose	
UniProt	P48735	
Localization	Cytoplasmic	
Applications	Western blot : 1-2ug/ml Immunohistochemistry (FFPE) : 2-5ug/ml Immunofluorescence : 5ug/ml	

Limitations

This Isocitrate Dehydrogenase 2 antibody is available for research use only.



Flow cytometry testing of human SiHa cells with Isocitrate Dehydrogenase 2 antibody at 1ug/million cells (blocked with goat sera); Red=cells alone, Green=isotype control, Blue= Isocitrate Dehydrogenase 2 antibody.



IHC staining of FFPE human ovarian cancer with Isocitrate Dehydrogenase 2 antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



IHC staining of FFPE human melanoma with Isocitrate Dehydrogenase 2 antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



IHC staining of FFPE human rectal cancer with Isocitrate Dehydrogenase 2 antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



IHC staining of FFPE human testicular cancer with Isocitrate Dehydrogenase 2 antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



IHC staining of FFPE rat skeletal muscle with Isocitrate Dehydrogenase 2 antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



Immunofluorescent staining of FFPE human A431 cells with Isocitrate Dehydrogenase 2 antibody (green) and DAPI nuclear stain (blue). HIER: steam section in pH6 citrate buffer for 20 min.



Western blot testing of human 1) HeLa, 2) SW620, 3) MCF7, 4) HepG2, 5) Jurkat, 6) rat heart, 7) rat liver, 8) rat PC-12, 9) mouse heart, 10) mouse liver and 10) mouse NIH 3T3 cell lysate with Isocitrate Dehydrogenase 2 antibody. Predicted molecular weight: 45-51 kDa (two isoforms).

Description

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.

Application Notes

Optimal dilution of the Isocitrate Dehydrogenase 2 antibody should be determined by the researcher.

Immunogen

Amino acids KDLAGCIHGLSNVKLNEHFLNTTDFLDTIKSNLDR from the human protein were used as the immunogen for the Isocitrate Dehydrogenase 2 antibody.

Storage

After reconstitution, the Isocitrate Dehydrogenase 2 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.