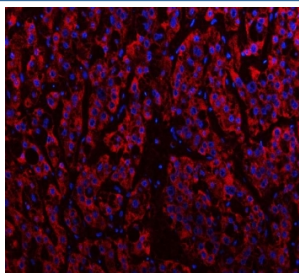


IDH3A Antibody / Isocitrate dehydrogenase [NAD] subunit alpha (RQ8516)

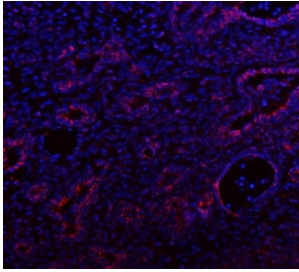
Catalog No.	Formulation	Size
RQ8516	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

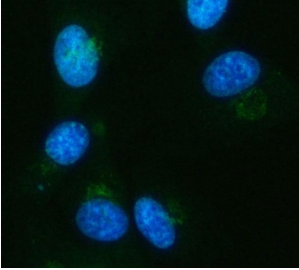
Availability	1-3 days
Species Reactivity	Human, Mouse, Rat
Format	Antigen affinity purified
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity purified
Buffer	Lyophilized from 1X PBS with 2% Trehalose
UniProt	P50213
Localization	Cytoplasm
Applications	Western Blot : 0.5-1ug/ml Immunohistochemistry (FFPE) : 2-5ug/ml Immunofluorescence : 5ug/ml Flow Cytometry : 1-3ug/million cells ELISA : 0.1-0.5ug/ml
Limitations	This IDH3A antibody is available for research use only.



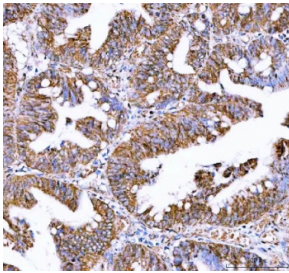
Immunofluorescent staining of FFPE human liver cancer tissue with IDH3A antibody (red) and DAPI nuclear stain (blue). HIER: steam section in pH8 EDTA buffer for 20 min.



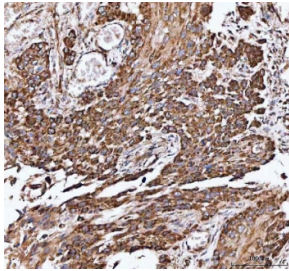
Immunofluorescent staining of FFPE human intestinal cancer tissue with IDH3A antibody (red) and DAPI nuclear stain (blue). HIER: steam section in pH8 EDTA buffer for 20 min.



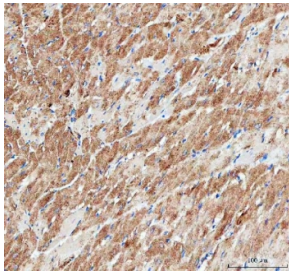
Immunofluorescent staining of FFPE human PC-3 cells with IDH3A antibody (green) and DAPI nuclear stain (blue). HIER: steam section in pH6 citrate buffer for 20 min.



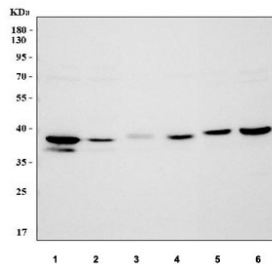
IHC staining of FFPE human rectum adenocarcinoma tissue with IDH3A antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



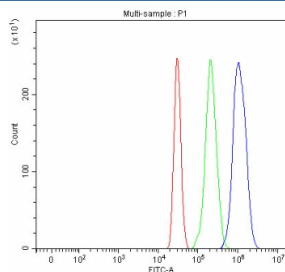
IHC staining of FFPE human esophageal squamous carcinoma tissue with IDH3A antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



IHC staining of FFPE rat heart tissue with IDH3A antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



Western blot testing of 1) human HepG2, 2) human HeLa, 3) rat brain, 4) rat heart, 5) mouse brain and 6) mouse heart tissue lysate with IDH3A antibody. Predicted molecular weight ~40 kDa.



Flow cytometry testing of fixed and permeabilized human HepG2 cells with IDH3A antibody at 1ug/million cells (blocked with goat sera); Red=cells alone, Green=isotype control, Blue= IDH3A antibody.

Description

Isocitrate dehydrogenase [NAD] subunit alpha, mitochondrial (IDH3?) is an enzyme that in humans is encoded by the IDH3A 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. NAD(+)-dependent isocitrate dehydrogenases catalyze the allosterically regulated rate-limiting step of the tricarboxylic acid cycle. Each isozyme is a heterotetramer that is composed of two alpha subunits, one beta subunit, and one gamma subunit. The protein encoded by this gene is the alpha subunit of one isozyme of NAD(+)-dependent isocitrate dehydrogenase.

Application Notes

Optimal dilution of the IDH3A antibody should be determined by the researcher.

Immunogen

An E.coli-derived human recombinant protein (amino acids K9-D366) was used as the immunogen for the IDH3A antibody.

Storage

After reconstitution, the IDH3A antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.