Datasheet for ABIN3025025

anti-IDH1 antibody (AA 280-420)

2 Images

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Overview

Quantity:	100 µg
Target:	IDH1
Binding Specificity:	AA 280-420
Reactivity:	Human
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This IDH1 antibody is un-conjugated
Application:	Western Blotting (WB), Flow Cytometry (FACS), Immunofluorescence (IF), Immunohistochemistry (Paraffin-embedded Sections) (IHC (p))

Product Details

Immunogen:	A recombinant fragment (119 amino acid residues around aa 280-420) from the human protein was used as the immunogen for the IDH1 antibody.
Clone:	IDH1-1152
Isotype:	IgG1 kappa
Characteristics:	It recognizes a 45 kDa 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 a-ketoglutarate and CO2 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 a-ketoglutarate. During this process, either NADH or NADPH is produced along with CO2.

Product Details

	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.
Purification:	Protein G affinity chromatography

Target Details

Target:	IDH1
Alternative Name:	IDH1 (IDH1 Products)
Background:	It recognizes a 45 kDa 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 a-ketoglutarate and CO2 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 a-ketoglutarate. During this process, either NADH or NADPH is produced along with CO2. 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.
Pathways:	Warburg Effect

Application Details

Application Notes:	Optimal dilution of the IDH1 antibody should be determined by the researcher. 1. Staining of formalin-fixed tissues requires boiling tissue sections in 10 mM Tris with 1 mM EDTA, pH 9.0 or 10 mM Citrate buffer, pH 6.0, for 10-20 min followed by cooling at RT for 20 min 2. The prediluted format is supplied in a dropper bottle and is optimized for use in IHC. After epitope retrieval step (if required), drip mAb solution onto the tissue section and incubate at RT for 30 min.\. Flow Cytometry: 0.5-1 µg/million cells in 0.1ml,Immunofluorescence: 0.5-1 µg/mL,Western blot: 0.5-1 µg/mL,Immunohistochemistry (FFPE): 0.5-1 µg/mL for 30 min at RT (1),Prediluted format : incubate for 30 min at RT (2)
Restrictions:	For Research Use only

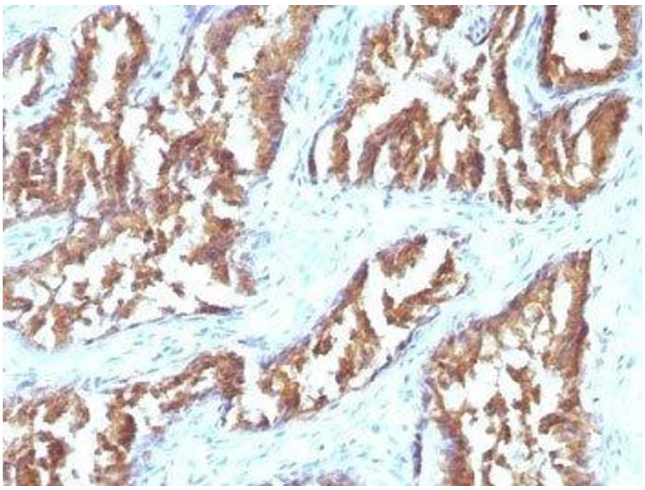
Handling

Concentration:	0.2 mg/mL

Handling

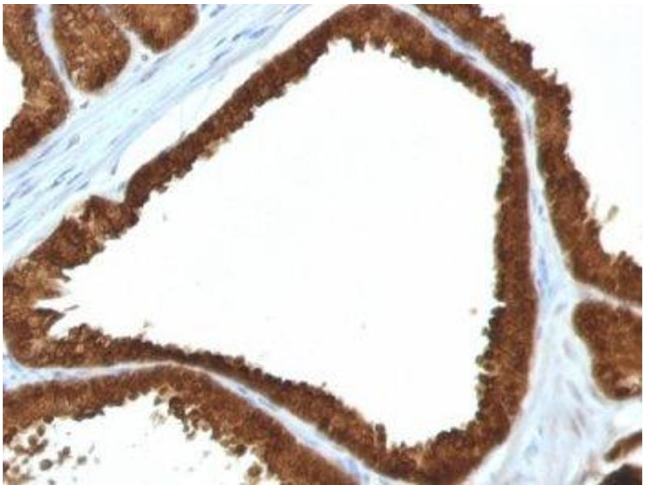
Buffer:	0.2 mg/mL in 1X PBS with 0.1 mg/mL BSA (US sourced) and 0.05 % sodium azide
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	4 °C,-20 °C
Storage Comment:	Store the IDH1 antibody at 2-8°C (with azide) or aliquot and store at -20°C or colder (without azide).

Images



Immunohistochemistry

Image 1. Formalin-fixed, paraffin-embedded human prostate carcinoma stained with IDH1 antibody (IDH1/1152).



Immunohistochemistry

Image 2. Formalin-fixed, paraffin-embedded human colon carcinoma stained with IDH1 antibody (IDH1/1152).