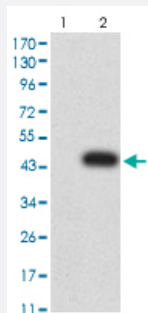


IDH1 monoclonal antibody, clone 7G8A1

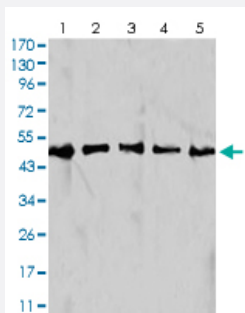
Catalog # MAB17855 Size 100 ug

Applications



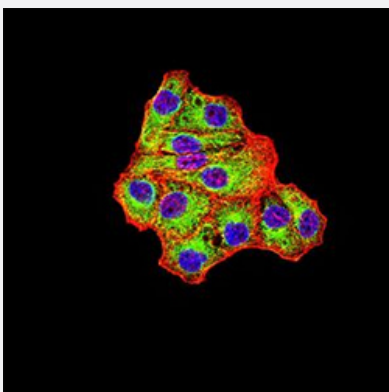
Western Blot (Transfected lysate)

Western Blot (Transfected lysate) analysis of (1) HEK293, (2) IDH1-hlgGfc transfected HEK293 cell lysate.



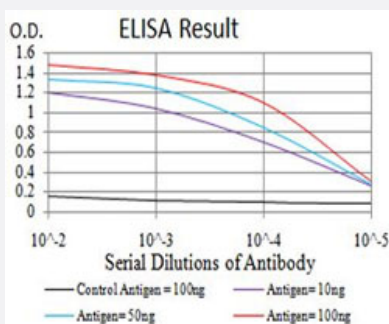
Western Blot

Western Blot analysis of (1) HepG2, (2) NIH/3T3, (3) C2C12, (4) COS7, (5) SW480 cell lysate.



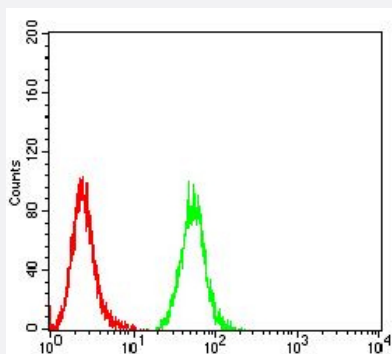
Immunofluorescence

Immunofluorescent staining of HeLa cell line with antibody (green). Blue: DRAQ5 fluorescent DNA dye. Red: Actin filaments have been labeled with Alexa Fluor-555 phalloidin.



Enzyme-linked Immunoabsorbent Assay

ELISA analysis of IDH1 monoclonal antibody.



Flow Cytometry

Flow cytometric analysis of HeLa cells using IDH1 mouse monoclonal antibody (green) and negative control (red).

Specification

Product Description	Mouse monoclonal antibody raised against recombinant human IDH1.
Immunogen	Recombinant protein corresponding to amino acids 156-298 of human IDH1 from <i>E. coli</i> .
Host	Mouse
Theoretical MW (kDa)	46.7
Reactivity	Human, Monkey, Mouse
Form	Liquid
Isotype	IgG1
Recommend Usage	ELISA (1:10000) Flow Cytometry (1:200-400) Immunofluorescence (1:50-250) Western Blot (1:100-1:500) The optimal working dilution should be determined by the end user.
Storage Buffer	In PBS (0.05% sodium azide).
Storage Instruction	Store at 4°C. For long term storage store at -20°C. Aliquot to avoid repeated freezing and thawing.
Note	This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

Applications

- Western Blot (Transfected lysate)

Western Blot (Transfected lysate) analysis of (1) HEK293, (2) IDH1-hlgFc transfected HEK293 cell lysate.

- Western Blot

Western Blot analysis of (1) HepG2, (2) NIH/3T3, (3) C2C12, (4) COS7, (5) SW480 cell lysate.

- Immunofluorescence

Immunofluorescent staining of HeLa cell line with antibody (green). Blue: DRAQ5 fluorescent DNA dye. Red: Actin filaments have been labeled with Alexa Fluor-555 phalloidin.

- Enzyme-linked Immunoabsorbent Assay

ELISA analysis of IDH1 monoclonal antibody.

- Flow Cytometry

Flow cytometric analysis of HeLa cells using IDH1 mouse monoclonal antibody (green) and negative control (red).

Gene Info — IDH1

Entrez GeneID [3417](#)

Gene Name IDH1

Gene Alias IDCDC, IDH, IDP, IDPC, PICD

Gene Description isocitrate dehydrogenase 1 (NADP+), soluble

Omim ID [147700](#)

Gene Ontology [Hyperlink](#)

Gene Summary

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 cytoplasm and peroxisomes. It contains the PTS-1 peroxisomal targeting signal sequence. The presence of this enzyme in peroxisomes suggests roles in the regeneration of NADPH for intraperoxisomal reductions, such as the conversion of 2, 4-dienoyl-CoAs to 3-enoyl-CoAs, as well as in peroxisomal reactions that consume 2-oxoglutarate, namely the alpha-hydroxylation of phytanic acid. The cytoplasmic enzyme serves a significant role in cytoplasmic NADPH production. [provided by RefSeq]

Other Designations NADP+-specific ICDH|NADP-dependent isocitrate dehydrogenase, cytosolic|NADP-dependent isocitrate dehydrogenase, peroxisomal|oxalosuccinate decarboxylase

Pathway

- [Biosynthesis of alkaloids derived from histidine and purine](#)
- [Biosynthesis of alkaloids derived from ornithine](#)
- [Biosynthesis of alkaloids derived from shikimate pathway](#)
- [Biosynthesis of alkaloids derived from terpenoid and polyketide](#)
- [Biosynthesis of phenylpropanoids](#)
- [Biosynthesis of plant hormones](#)
- [Biosynthesis of terpenoids and steroids](#)
- [Citrate cycle \(TCA cycle\)](#)
- [Glutathione metabolism](#)
- [Metabolic pathways](#)
- [Reductive carboxylate cycle \(CO₂ fixation\)](#)

Disease

- [Adenoma](#)
- [Astrocytoma](#)
- [Blast Crisis](#)
- [Brain Neoplasms](#)
- [Carcinoma](#)
- [Chronic Disease](#)
- [Cleft Lip](#)
- [Cleft Palate](#)
- [Disease Progression](#)
- [Disease Susceptibility](#)
- [Genetic Predisposition to Disease](#)
- [Glioblastoma](#)
- [Glioma](#)

- [Hematologic Diseases](#)
- [HIV Infections](#)
- [Leukemia](#)
- [Lung Neoplasms](#)
- [Lymphoma](#)
- [Melanoma](#)
- [Monosomy](#)
- [Myelodysplastic Syndromes](#)
- [Myeloproliferative Disorders](#)
- [Neoplasm Metastasis](#)
- [Nervous System Neoplasms](#)
- [Neuroectodermal Tumors](#)
- [Oligodendroglioma](#)
- [Pancreatic cancer](#)
- [Pancreatic Neoplasms](#)
- [Polycythemia Vera](#)
- [Primary Myelofibrosis](#)
- [Recurrence](#)
- [Skin Neoplasms](#)
- [Supratentorial Neoplasms](#)
- [Thrombocythemia](#)
- [Thyroid Neoplasms](#)