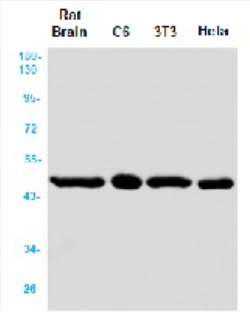
RecomAb™

IDH1 recombinant monoclonal antibody, clone R05-2G5

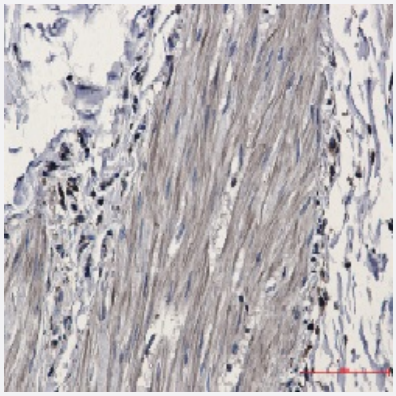
Catalog # RAB01738 Size 100 uL

Applications



Western Blot

Western blot analysis of IDH1 in rat Brain, C6, 3T3, Hela lysates using human Isocitrate dehydrogenase recombinant monoclonal antibody, clone R05-2G5 (Cat # RAB01738).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

Immunohistochemistry (Formalin-fixed paraffin-embedded sections) of Human Cholangiocarcinoma with Isocitrate dehydrogenase recombinant monoclonal antibody, clone R05-2G5 (Cat # RAB01738).

Specification

Product Description	Rabbit recombinant monoclonal antibody raised against synthetic peptide of human Isocitrate dehydrogenase.
Antibody Species	Rabbit
Immunogen	Original antibody is raised against a synthetic peptide corresponding to human Isocitrate dehydrogenase
Theoretical MW (kDa)	Calculated MW: 47 kD

Reactivity	Human
Form	Liquid
Purification	Affinity purification
Isotype	IgG
Recommend Usage	Immunohistochemistry (1:50-1:100) Immunoprecipitation (1:20) Western Blot (1:500-1:1,000) The optimal working dilution should be determined by the end user.
Storage Buffer	In 50 mM Tris-Glycine, pH 7.4 (0.15 M NaCl, 40% Glycerol, 0.01% Sodium azide and 0.05% BSA)
Storage Instruction	Store at 4°C for short term. 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 shoul d be handled by trained staff only.

Applications

- Western Blot

  Western blot analysis of IDH1 in rat Brain, C6, 3T3, Hela lysates using human Isocitrate dehydrogenase recombinant monoclonal antibody, clone R05-2G5 (Cat # RAB01738).

- Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

  Immunohistochemistry (Formalin-fixed paraffin-embedded sections) of Human Cholangiocarcinoma with Isocitrate dehydrogenase recombinant monoclonal antibody, clone R05-2G5 (Cat # RAB01738).

- Immunoprecipitation

Gene Info — IDH1

Entrez GeneID	3417
Protein Accession#	O75874
Gene Name	IDH1
Gene Alias	IDCD, 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