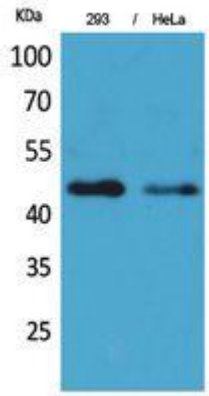
IDH1 Monoclonal Antibody

Catalog No	BYmab-04335
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	WB
Gene Name	IDH1
Protein Name	Isocitrate dehydrogenase [NADP] cytoplasmic
Immunogen	Synthesized peptide derived from the N-terminal region of human IDH1.
Specificity	IDH1 Monoclonal Antibody detects endogenous levels of IDH1 protein.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Monoclonal, Mouse,IgG
Purification	The antibody was affinity-purified from mouse antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	WB 1:500-2000
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	IDH1; PICD; Isocitrate dehydrogenase [NADP] cytoplasmic; IDH; Cytosolic NADP-isocitrate dehydrogenase; IDP; NADP(+)-specific ICDH; Oxalosuccinate decarboxylase
Observed Band	46kD
Cell Pathway	Cytoplasm, cytosol . Peroxisome .
Tissue Specificity	Brain,Cajal-Retzius cell,Fetal brain cortex,Human endometri
Function	catalytic activity:Isocitrate + NADP(+) = 2-oxoglutarate + CO(2) + NADPH.,catalytic activity:Oxalosuccinate + NADP(+) = 2-oxoglutarate + CO(2) + NADPH.,cofactor:Binds 1 magnesium or manganese ion per subunit.,disease:Defects in IDH1 are a cause of glioblastoma multiforme (GBM) [MIM:137800]; also called familial glioma of brain. Gliomas are central nervous system neoplasms derived from glial cells and comprise astrocytomas, glioblastoma multiforme, oligodendrogliomas, and ependymomas.,miscellaneous:Cancer mutations affecting Arg-132 are tissue-specific, and suggest that this residue plays a unique role in the development of high-grade gliomas.,online information:Isocitrate dehydrogenase

	entry,similarity:Belongs to the isocitrate and isopropylmalate dehydrogenases family.,subunit:Homodimer.,
Background	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
matters needing attention	Avoid repeated freezing and thawing!
Usage suggestions	This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

Products Images



Western Blot analysis of various cells using IDH1 Monoclonal Antibody