

KD-Validated Anti-IDH1 Rabbit Monoclonal Antibody

Rabbit monoclonal antibody Catalog # AGI1060

Specification

Aliases

KD-Validated Anti-IDH1 Rabbit Monoclonal Antibody - Product Information

Application WB, FC Primary Accession O75874

Reactivity
Clonality
Monoclonal
Isotype
Rat, Human, Mouse
Monoclonal
Rabbit IgG

Calculated MW Predicted, 47 kDa , observed, 45 kDa KDa

Gene Name IDH1

IDH1; Isocitrate Dehydrogenase (NADP(+))
1; Isocitrate Dehydrogenase (NADP(+)) 1,
Cytosolic; Isocitrate Dehydrogenase 1

(NADP+), Soluble; Isocitrate

Dehydrogenase [NADP] Cytoplasmic;

Oxalosuccinate Decarboxylase;

NADP(+)-Specific ICDH; EC 1.1.1.42; PICD;

IDH; NADP-Dependent Isocitrate Dehydrogenase, Peroxisomal; NADP-Dependent Isocitrate

Dehydrogenase, Cytosolic; Epididymis Secretory Sperm Binding Protein; Cytosolic NADP-Isocitrate Dehydrogenase; Isocitrate Dehydrogenase 1 (NADP+); Epididymis Secretory Protein Li 26; Epididymis Luminal Protein 216; HEL-S-26; HEL-216;

IDCD; IDPC; IDPc; IDP

Immunogen A synthesized peptide derived from human

IDH1

KD-Validated Anti-IDH1 Rabbit Monoclonal Antibody - Additional Information

Gene ID 3417

Other Names

Isocitrate dehydrogenase [NADP] cytoplasmic, IDH, IDH1, 1.1.1.42, Cytosolic NADP-isocitrate dehydrogenase, IDPc, NADP(+)-specific ICDH, Oxalosuccinate decarboxylase, IDH1, PICD

KD-Validated Anti-IDH1 Rabbit Monoclonal Antibody - Protein Information

Name IDH1

Synonyms PICD

Function

Catalyzes the NADP(+)-dependent oxidative decarboxylation of isocitrate (D-threo-isocitrate) to



2-ketoglutarate (2-oxoglutarate), which is required by other enzymes such as the phytanoyl-CoA dioxygenase (PubMed:<a href="http://www.uniprot.org/citations/10521434"

target="_blank">10521434, PubMed:19935646). Plays a critical role in the generation of NADPH, an important cofactor in many biosynthesis pathways (PubMed:10521434). May act as a corneal epithelial crystallin and may be involved in maintaining corneal epithelial transparency (By similarity).

Cellular Location

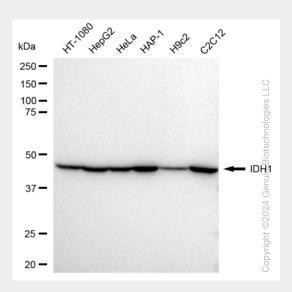
Cytoplasm, cytosol. Peroxisome

KD-Validated Anti-IDH1 Rabbit Monoclonal Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

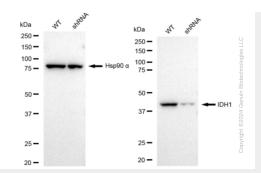
- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

KD-Validated Anti-IDH1 Rabbit Monoclonal Antibody - Images

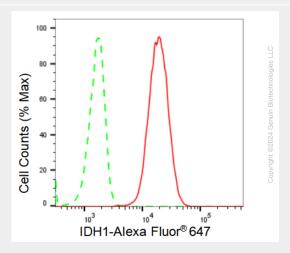


Western blotting analysis using anti-IDH1 antibody (Cat#61181). Total cell lysates (30 μ g) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-IDH1 antibody (Cat#61181, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (Cat#201, 1:20,000) respectively. Image was developed using FeQTM ECL Substrate Kit (Cat#226).





Western blotting analysis using anti-IDH1 antibody (Cat#61181). IDH1 expression in wild type (WT) and IDH1 shRNA knockdown (KD) HeLa cells with 30 μ g of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with anti-IDH1 antibody (Cat#61181, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (Cat#201, 1:20,000) respectively. Image was developed using FeQ $^{\text{TM}}$ ECL Substrate Kit (Cat#226).



Flow cytometric analysis of IDH1 expression in C2C12 cells using IDH1 antibody (Cat#61181, 1:2,000). Green, isotype control; red, IDH1.