

Mouse anti-Human IDH1 R132H Monoclonal Antibody | anti-IDH1 R132H antibody

IDH1 R132H

CATALOG # AAA59310	HOST Mouse	REACTIVITY Human	APPLICATIONS Immunohistochemistry
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PRODUCT SYNONYMS

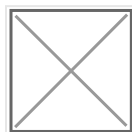
IDH1 R132H; Monoclonal Antibody; anti-IDH1 R132H antibody

PRODUCT SPECIFICATIONS

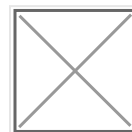
Host	Mouse
Reactivity	Human
Clonality	Monoclonal
Isotype	IgG1
Clone Number	IHC132
Form/Format	Prediluted
Applicable Applications for anti-IDH1 R132H antibody	IHC (Immunohistochemistry)
Immunogen	Synthetic peptide corresponding to the human IDH1 surrounding residual 132.
Localization	Cytoplasmic
Control	Glioma, Glioblastoma, Astrocytoma with IDH1 R132H Mutation
Presentation	ADHL 1 R132H is a mouse monoclonal antibody derived from cell culture supernatant that is concentrated, dialyzed, filter sterilized and diluted in buffer pH 7.5, containing BSA and sodium azide as a preservative.
Specimen Preparation	Paraffin sections: The antibody can be used on formalin-fixed paraffin-embedded (FFPE) tissue sections. Ensure tissue undergoes appropriate fixation for best results. Pre-treatment of tissues with heat-induced epitope retrieval (HIER) is recommended using ImmunoDNA Retriever with Citrate, ImmunoDNA Retriever with EDTA or ImmunoDNA Digestor. Tissue should remain hydrated via use of ImmunoDNA Washer solutions. Frozen sections and cell preparations: The antibody can be used for labeling acetone-fixed frozen sections and acetone-fixed cell preparations.

IHC Protocol	1. Cut and mount 3-5 micron formalin-fixed paraffin-embedded tissues on positively charged slides such as Hydrophilic Plus Slides. 2. Air dry for 2 hours at 58°C. 3. Deparaffinize and rehydrate tissues. 4. Subject tissues to heat induced epitope retrieval (HIER) using a suitable retrieval solution such as ImmunoDNA Retriever with Citrate or EDTA. 5. Any of three heating methods may be used: a. TintoRetriever Pressure Cooker or Equivalent Place tissues/slides in a staining dish or coplin jar containing the ImmunoDNA Retriever with Citrate or EDTA, and place on trivet in the pressure cooker. Add 1-2 inches of distilled water to the pressure cooker and turn heat to high. Incubate for 15 minutes. Open and immediately transfer slides to room temperature. b. TintoRetriever PT Module or Water Bath Method Place tissues/slides in a pre-warmed staining dish or coplin jar containing the ImmunoDNA Retriever with Citrate or EDTA at 95°-99°C. Incubate for 30-60 minutes. c. Conventional Steamer Method Place tissues/slides in a pre-warmed staining dish or coplin jar containing the ImmunoDNA Retriever with Citrate or EDTA in a steamer, cover and steam for 30-60 minutes. 6. After heat treatment, transfer slides in ImmunoDNA Retriever with Citrate or EDTA to room temperature and let stand for 15-20 minutes. 7. For manual staining, perform antibody incubation at ambient temperature. For automated staining methods, perform antibody incubation according to instrument manufacturer's instructions. 8. Wash slides with ImmunoDNA washer or DI water. 9. Continue IHC staining protocol. Wash slides between each step with ImmunoDNA washer solution.
Mounting Protocols	For detailed instructions using biodegradable permanent mounting media such as XyGreen PermaMounter or organic solvent based resin such as PermaMounter refer to P10174 or P10097.
Product Limitations	Due to inherent variability present in immunohistochemical procedures (including fixation time of tissues, dilution factor of antibody, retrieval method utilized, and incubation time), optimal performance should be established through the use of positive and negative controls.
Preparation and Storage	Store at 2-8°C (Control Slides: Store at 20-25°C)

IMAGES



Protocol



IHC (Immunohistochemistry)
IHC of IDH1 R132H on a FFPE Glioma Tissue

ADDITIONAL INFORMATION

Related Product Information for anti-IDH1 R132H antibody	The IDH7 gene on chromosome band 2q33.3 encodes for isocitrate dehydrogenase 1 (IDH1), located in the cytoplasm and the peroxisomes. This enzyme catalyzes NADPH production via oxidative decarboxylation of isocitrate to alpha-ketoglutarate in the Krebs citric acid cycle. Studies have shown that IDH1 mutation is an early step in gliomagenesis and has been reported to occur in grades II and III astrocytomas, oligodendrogliomas (OG), oligoastrocytomas (OA), and secondary GBM. Mutations involving IDH1 occur in a high proportion of diffuse gliomas, with implications on identification. About 90% involve exon 4 at codon 132, replacing amino acid arginine with histidine (R132H). Preliminary studies comparing Immunohistochemistry (IHC) with IDH1-R132H mutation-specific antibodies have shown concordance with DNA sequencing and no cross-reactivity with wild-type IDH1 or other mutant proteins.
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For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.