EpiDtect™

IDH1 Primary Antibody

Clone: IDH1/7328 *(Rabbit Monoclonal)*

Localization – Cytoplasm
Host Species – Rabbit
Ig Class – IgG, kappa

ORDERING INFORMATION	
CATALOG#	**DESCRIPTION**
DH275-01C	0.1 ML Concentrated Antibody Vial
DH275-05C	0.5 ML Concentrated Antibody Vial
DH275-1C	1 ML Concentrated Antibody Vial
DH275-3R	3 ML Ready-to-Use Antibody Vial
DH275-6R	6 ML Ready-to-Use Antibody Vial
DH275-12R	12 ML Ready-to-Use Antibody Vial

Intended Use

This antibody is designed for the specific localization of IDH1 in formalin-fixed, paraffin-embedded (FFPE) tissue sections.

Storage & Handling

Store RTU Vial at 2-8°C. Fresh dilutions for concentrated antibodies, if required, should be prepared prior to use and are stable for up to one day at room temperature (20-26°C).

Working Principle

IHC is a two-step process wherein the primary antibody binds to the antigen of interest and that binding is detected by a chromogen. The primary antibody may be used in IHC using manual techniques or any Automated Staining System. Positive and negative controls should always be run simultaneously with all patient specimens.

Product Description

Isocitrate dehydrogenases (IDHs) catalyze the oxidative decarboxylation of isocitrate to 2-oxoglutarate, using either NAD^+ or $NADP^+$ as electron acceptors. Five isoforms have been identified: three NAD^+-dependent forms localized to the mitochondrial matrix, and two $NADP^+$-dependent isoforms—one mitochondrial and the other primarily cytosolic. The $NADP^+$-dependent isozymes, including IDH1, function as homodimers. IDH1 is localized in the cytoplasm and peroxisomes and contains a PTS1 peroxisomal targeting sequence. In peroxisomes, it contributes to NADPH regeneration for redox reactions, such as the reduction of 2, 4-dienoyl-CoAs to 3-enoyl-CoAs and the α-hydroxylation of phytanic acid, which requires 2-oxoglutarate. In the cytoplasm, IDH1 plays a vital role in NADPH production, supporting lipid biosynthesis and cellular antioxidant defense. This antibody product is specific for the IDH1 R132H mutation, a common neomorphic mutation in gliomas and other cancers, which results in the production of the oncometabolite D-2-hydroxyglutarate, contributing to tumorigenesis.

Material Supplied

IDH1 antibody is affinity purified and diluted in PBS, pH 7.4, containing 1% BSA and 0.09% sodium azide.

Material required But Not Supplied

- Xylene
- DI Water
- Control Tissues
- Isopropyl alcohol
- Antigen retrieval buffers
- Hematoxylin
- Positive charged slides
- Blocking Reagents
- Mounting media
- Wash Buffer
- Detection System
- Cover glass

Working Reagent Procedure

- Ready-to-Use antibodies have been optimized for use with the recommended protocols and should not require further dilution.
- Concentrated antibodies must be diluted in accordance with the recommended protocol.

Recommended Protocol

Refer the following table for the details on specific recommended protocol for this antibody.

Control Tissue	Glioma tissue
Dilution factor	**1:20-50** (Antibody Diluent: DH144)

Antibody Incubation Time	30-60 Minutes at RT
Retrieval Pre-treatment	**Tris-EDTA based HIER** (AR9 Buffer: DH020)

Precautions

This product should be used by qualified and trained professional users only.
Avoid microbial contamination of reagents to minimize non-specific staining. Never pipette reagents by mouth. Avoid contact of reagents and specimens with skin. If reagents or specimens come into contact with sensitive area, wash with sufficient amounts of water. Dispose of the unused reagents. This kit contain sodium azide at concentrations of less than 0.1%. Sodium azide is not classified as a hazardous chemical at these concentrations, but proper handling protocols should be observed. For more information on product hazards, precautions and waste disposal, *Material Safety Data Sheets* are available upon request.

Limitations

Improper tissue handling and processing prior to immunostaining can lead to inconsistent results. Variations in embedding and fixation or the nature of the tissue may lead to variations in results. Endogenous peroxidase activity or pseudo peroxidase activity in erythrocytes and tissue biotin may result in non-specific staining based on the detection system employed. Tissues containing Hepatitis B Surface Antigen (HBsAg) may give false positive with horseradish peroxidase systems. Improper counterstaining and mounting may compromise the interpretation of results. Interpretation of the staining result is solely the responsibility of the user. Experimental results should be confirmed by a medically-established diagnostic product or procedure. Evaluation must be performed by a qualified pathologist.

Troubleshooting

For Technical SuppPort contact us at +91 - *7506501122* or *info@dygnova.com* or your local distributor to report unusual staining.

Doc No: *DH/DS/IDH275Rev.00*

	Manufacturer Details		Use by Date	LOT	Lot/Batch Number
	Manufacturing Date		Consult Instructions for Use	REF	Catalogue Number
	Temperature Limits		Sufficient for 'n' assays / tests	IVD	In-vitro Diagnostic Medical Device

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