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## Human Isocitrate Dehydrogenase 2/IDH2 Antibody

## **R**Dsystems

Monoclonal Mouse IgG<sub>2B</sub> Clone # 1069032

DESCRIPTION	
Species Reactivity	Human
Specificity	Detects human IDH-2 in direct ELISA.
Source	Monoclonal Mouse IgG <sub>2B</sub> Clone # 1069032
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli-</i> derived recombinant human IDH-2 Thr376-Gln452 Accession # P48735
Formulation	Lyophilized from a 0.2 µm filtered solution in PRS with Trebalose

### APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.			
	Recommended Concentration	Sample	
Immunocytochemistry	3-25 μg/mL	Fixed MCF-7 human breast cancer cell line (Positive) and SK-Mel-28 human malignant melanoma cell line (Positive)	
Immunohistochemistry	3-25 μg/mL	Immersion fixed paraffin-embedded sections of human kidney	
Intracellular Staining by Flow Cytometry	0.25 μg/10 <sup>6</sup> cells	Jurkat human acute T cell leukemia cell line	

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**R**DSYSTEMS

## Human Isocitrate Dehydrogenase 2/IDH2 Antibody

Monoclonal Mouse IgG2B Clone # 1069032

## Ostalas Nussham MAD44400



**Detection of Isocitrate** Dehydrogenase 2/IDH2 in Jurkat cells by Flow Cytometry Jurkat cells were stained with Mouse Anti-Human Isocitrate Dehydrogenase 2/IDH2 Monoclonal Antibody (Catalog # MAB11462, filled histogram) or isotype control antibody (Catalog # MAB0041, open histogram) followed by Allophycocyaninconjugated Anti-Mouse IgG Secondary Antibody (Catalog # F0101B). To facilitate intracellular staining, cells were fixed with Flow Cytometry Fixation Buffer (Catalog # FC004) and permeabilized with Flow Cytometry Permeabilization/Wash Buffer I (Catalog # FC005). View our protocol for Staining Intracellular Molecules.

#### Immunocytochemistry/ Immunofluorescence



MCF-7 (Positive) cells SK-MEL-28 (Positive) cells

Detection of Isocitrate Dehydrogenase 2/IDH2 in MCF-7 cells (Positive) and SK-MEL-28 cells (Positive), Isocitrate Dehydrogenase 2/IDH2 was detected in fixed MCF-7 human breast cancer cell line (Positive) and SK-Mel-28 human malignant melanoma cell line (Positive) using Mouse Anti-Human Isocitrate Dehydrogenase 2/IDH2 Monoclonal Antibody (Catalog # MAB11462) at 8 µg/ml for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Mouse IgG Secondary Antibody (red; Catalog # NL007) and counterstained with DAPI (blue). Specific staining was localized to the cytoplasm and membrane. View our protocol for Fluorescent ICC Staining of Cells on Coverslips.

#### Immunohistochemistry



Detection of Isocitrate Dehydrogenase 2/IDH2 in Human Kidney. Isocitrate Dehydrogenase 2/IDH2 was detected in immersion fixed paraffin-embedded sections of human kidney using Mouse Anti-Human Isocitrate Dehydrogenase 2/IDH2 Monoclonal Antibody (Catalog # MAB11462) at 5 µg/ml for 1 hour at room temperature followed by incubation with the Anti-Mouse IgG VisUCyte™ HRP Polymer Antibody (Catalog # VC001). Before incubation with the primary antibody, tissue was subjected to heat-induced epitope retrieval using VisUCyte Antigen Retrieval Reagent-Basic (Catalog # VCTS021). Tissue was stained using DAB (brown) and counterstained with hematoxylin (blue). Specific staining was localized to the cytoplasm and kidney tubules. View our protocol for Chromogenic IHC Staining of Paraffin-embedded Tissue Sections.

PREPARATION AND STORAGE			
Reconstitution	Reconstitute at 0.5 mg/mL in sterile PBS.		
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.		
Stability & Storage	<ul> <li>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</li> <li>12 months from date of receipt, -20 to -70 °C as supplied.</li> <li>1 month, 2 to 8 °C under sterile conditions after reconstitution.</li> <li>6 months, -20 to -70 °C under sterile conditions after reconstitution.</li> </ul>		

### 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 mitochondria. It plays a role in intermediary metabolism and energy production. This protein may tightly associate or interact with the pyruvate dehydrogenase complex.

Rev. 3/8/2024 Page 2 of 2

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