

IDH1 (Isocitrate Dehydrogenase) Antibody

Mouse Monoclonal Antibody [Clone IDH1/1152]

Catalog No	Format	Size
3417-MSM2-P0	Purified Ab with BSA and Azide at 200ug/ml	20 ug
3417-MSM2-P1	Purified Ab with BSA and Azide at 200ug/ml	100 ug
3417-MSM2-P1ABX	Purified Ab WITHOUT BSA and Azide at 1.0mg/ml	100 ug

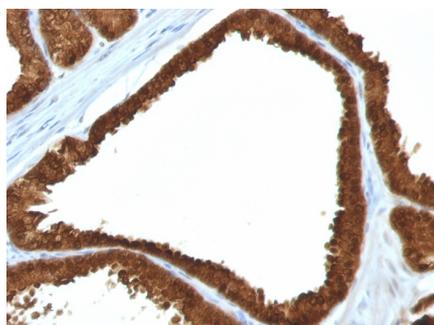
Applications	Tested Dillution	Note
Immunofluorescence (IF)	1-3ug/ml	
Immunohistochemistry (IHC)	1-2ug/ml	30 min at RT. Staining of formalin-fixed tissues requires heating tissue sections in 10mM Tris with 1mM EDTA, pH 9.0, for 45 min at 95°C followed by cooling at RT for 20 minutes
Western Blot (WB)	2-4ug/ml	

Product Details

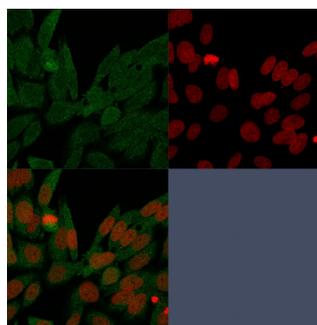
Clone	IDH1/1152
Gene Name	IDH1
Immunogen	Recombinant fragment of human IDH1 protein (around aa 281-414) (exact sequence is proprietary)
Host	Mouse
Clonality	Monoclonal
Isotype / Light Chain	IgG1 / Kappa
Mol. Weight of Antigen	45-47kDa
Cellular Localization	Cytoplasm, Cytosol, Peroxisome
Species Reactivity	Human
Positive Control	Human breast, Kidney colon or prostate carcinoma. HeLa, HepG2, HT29 or MCF7 cells, A-549

*Optimal dilution for a specific application should be determined.

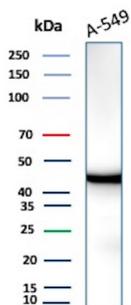
Product Images for IDH1 (Isocitrate Dehydrogenase) Antibody



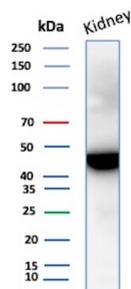
Formalin-fixed, paraffin-embedded human colon carcinoma stained with IDH1 Mouse Monoclonal Antibody (IDH1/1152).



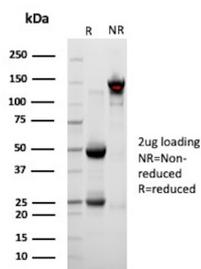
Immunofluorescence Analysis of PFA-fixed HeLa cells labeling IDH1. IDH1 Mouse Monoclonal Antibody (IDH1/1152) followed by goat anti-mouse IgG-CF488 (green). Nuclei counterstained with RedDot.



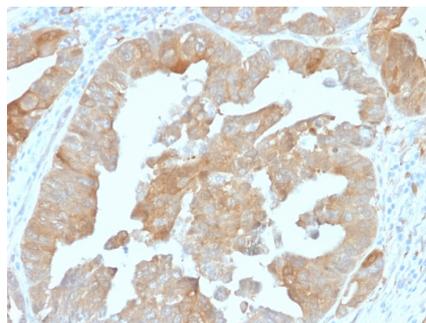
Western Blot Analysis of A-549 lysate using IDH1 Mouse Monoclonal Antibody (IDH1/1152).



Western Blot Analysis of Human Kidney tissue lysate using IDH1 Mouse Monoclonal Antibody (IDH1/1152).



SDS-PAGE Analysis of Purified IDH1 Mouse Monoclonal Antibody (IDH1/1152). Confirmation of Purity and Integrity of Antibody.



Formalin-fixed, paraffin-embedded human prostate carcinoma stained with IDH1 Mouse Monoclonal Antibody (IDH1/1152).

Specificity & Comments

It recognizes a 45kDa protein, which is identified as isocitrate dehydrogenase (IDH1). It belongs to the isocitrate and isopropylmalate dehydrogenases family. IDH1 catalyzes the third step of the citric acid cycle, which involves the oxidative decarboxylation of isocitrate, forming α -ketoglutarate and CO₂ in a two-step reaction. The first step involves the oxidation of isocitrate to the intermediate oxalosuccinate, while the second step involves the production of α -ketoglutarate. During this process, either NADH or NADPH is produced along with CO₂. Recently, an inactivating mutation of IDH1 has been implicated in glioblastoma. IDH1 appears to function as a tumor suppressor that, when mutationally inactivated, contributes to tumorigenesis in part through induction of the HIF-1 pathway.

Limitations and Warranty

This antibody is available for research use only and is not approved for use in diagnosis. There are no warranties, expressed or implied, which extend beyond this description. Company is not liable for any personal injury or economic loss resulting from this product.

Supplied As

200ug/ml of Ab purified from Bioreactor Concentrate by Protein A/G. Prepared in 1mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0mg/ml.

Storage and Stability

Antibody with azide - store at 2 to 8 °C. Antibody without azide - store at -20 to -80 °C. Antibody is stable for 24 months. Non-hazardous. No MSDS required.

Research Areas

Cardiovascular, Immunology, Infectious Disease, Nuclear Marker