

Recombinant IDH1-R132G (Isocitrate Dehydrogenase) Antibody

Rabbit Monoclonal Antibody [Clone IDH1.R132G/13054R]

Catalog No	Format	Size
3417-RBM13-P0	Purified Ab with BSA and Azide at 200ug/ml	20 ug
3417-RBM13-P1	Purified Ab with BSA and Azide at 200ug/ml	100 ug
3417-RBM13-P1ABX	Purified Ab WITHOUT BSA and Azide at 1.0mg/ml	100 ug

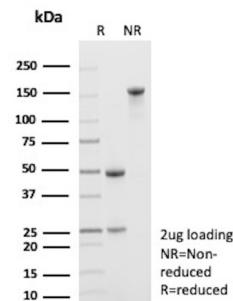
Applications	Tested Dillution	Note
Immunohistochemistry (IHC)	1-2ug/ml	30 min at RT. Staining of formalin-fixed tissues requires heating tissue sections in 10mM Tris with 1mM EDTA, pH 9.0, for 45 min at 95°C followed by cooling at RT for 20 minutes

Product Details

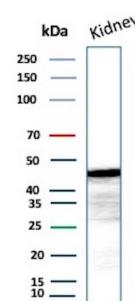
Clone	IDH1.R132G/13054R
Gene Name	IDH1
Immunogen	Recombinant fragment of human IDH1 protein with R132G (exact sequence is proprietary)
Host	Rabbit
Clonality	Monoclonal
Isotype / Light Chain	IgG / Kappa
Mol. Weight of Antigen	45-47kDa
Cellular Localization	Cytoplasm, Cytosol, Peroxisome
Species Reactivity	Human
Positive Control	Human breast, Kidney, colon or prostate carcinoma. HeLa, HepG2, HT29 or MCF-7 cells. Liver

*Optimal dilution for a specific application should be determined.

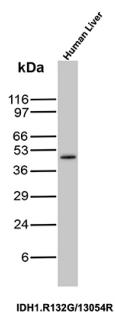
Product Images for Recombinant IDH1-R132G (Isocitrate Dehydrogenase) Antibody



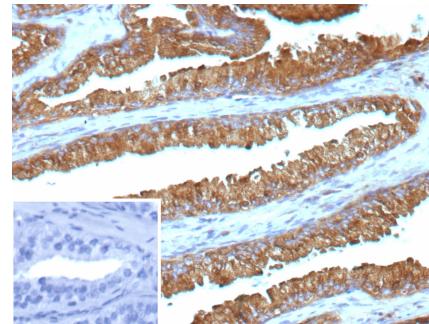
SDS-PAGE Analysis of Purified IDH1-R132G Recombinant Rabbit Monoclonal Antibody (IDH1.R132G/13054R). Confirmation of Purity and Integrity of Antibody.



Western Blot Analysis of human Kidney tissue lysate using IDH1-R132G Recombinant Rabbit Monoclonal Antibody (IDH1.R132G/13054R).



Western Blot Analysis of human liver tissue lysate using IDH1-R132G Recombinant Rabbit Monoclonal Antibody (IDH1.R132G/13054R).



Formalin-fixed, paraffin-embedded human prostate cancer stained with IDH1-R132G Recombinant Rabbit Monoclonal Antibody (IDH1.R132G/13054R). Inset: PBS instead of primary antibody; secondary only negative control.

Specificity & Comments

The gene represented in this entry is involved in disease pathogenesis. Mutations affecting Arg-132 are tissue-specific, and suggest that this residue plays a unique role in the development of high-grade gliomas. Mutations of Arg-132 to Cys, His, Leu or Ser abolish magnesium binding and abolish the conversion of isocitrate to alpha-ketoglutarate. Instead, alpha-ketoglutarate is converted to R(-)-2-hydroxyglutarate. Elevated levels of R(-)-2-hydroxyglutarate are correlated with an elevated risk of malignant brain tumors. Genetic variations are associated with cartilaginous tumors such as enchondroma or chondrosarcoma. Mutations of Arg-132 to Cys, Gly or His abolish the conversion of isocitrate to alpha-ketoglutarate. Instead, alpha-ketoglutarate is converted to R(-)-2-hydroxyglutarate.

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