

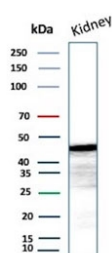
## IDH1-R132G Antibody / Isocitrate Dehydrogenase R132G mutant [clone IDH1.R132G/13054R] (V5737)

Catalog No.	Formulation	Size
V5737-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 ug
V5737-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	20 ug
V5737SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

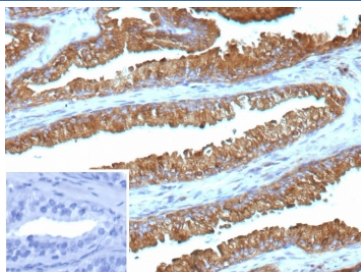
Recombinant **RABBIT MONOCLONAL**

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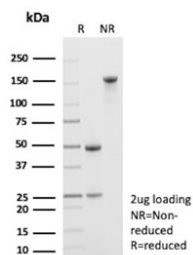
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG, kappa
Clone Name	IDH1.R132G/13054R
Purity	Protein A affinity
UniProt	O75874
Localization	Cytoplasm
Applications	Immunohistochemistry (FFPE) : 1-2ug/ml Western Blot : 2-4ug/ml
Limitations	This IDH1-R132G antibody is available for research use only.



Western blot testing of human kidney tissue lysate with IDH1-R132G antibody (clone IDH1.R132G/13054R). Predicted molecular weight ~47 kDa.



IHC staining of FFPE human prostate cancer tissue with IDH1-R132G antibody (clone IDH1.R132G/13054R). Inset: PBS used in place of primary Ab (secondary Ab negative control). HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 20 min and allow to cool before testing.



SDS-PAGE analysis of purified, BSA-free IDH1-R132G antibody (clone IDH1.R132G/13054R) as confirmation of integrity and purity.

## Description

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.

## Application Notes

Optimal dilution of the IDH1-R132G antibody should be determined by the researcher.

## Immunogen

A recombinant partial protein from human IDH1 protein with the R132G mutation was used as the immunogen for the IDH1-R132G antibody.

## Storage

Aliquot the IDH1-R132G antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.