IDH1-R132S monoclonal antibody (SMAb-1)

Mutations in the IDH 1 gene are commonly found in human gliomas. The Arginine to Serine substitution at amino acid 132 seen in gliomas, abolishes magnesium binding and alters enzyme activity so that isocitrate is no longer converted to alphaketoglutarate but instead alpha-ketoglutarate is converted to R(-)-2- hydroxyglutarate.

Isocitrate dehydrogenase 1 (NADP+), soluble is an enzyme that in humans is encoded by the IDH1 gene. Isocitrate dehydrogenases catalyze the oxidative decarboxylation of isocitrate to 2-oxoglutarate. IDH1 is one of three isocitrate dehydrogenase isozymes, the other two being IDH2 and IDH3. IDH1 mutations are heterozygous, typically involving an amino acid substitution in the active site of the enzyme in codon 132. The mutation results in a loss of normal enzymatic function and the abnormal production of 2-hydroxyglutarate (2-HG). Mutations in IDH1 are often the first hit in the development of diffuse gliomas, suggesting IDH1 mutations as key events in the formation of these brain tumors.

This antibody is covered by our Worry-Free Guarantee.

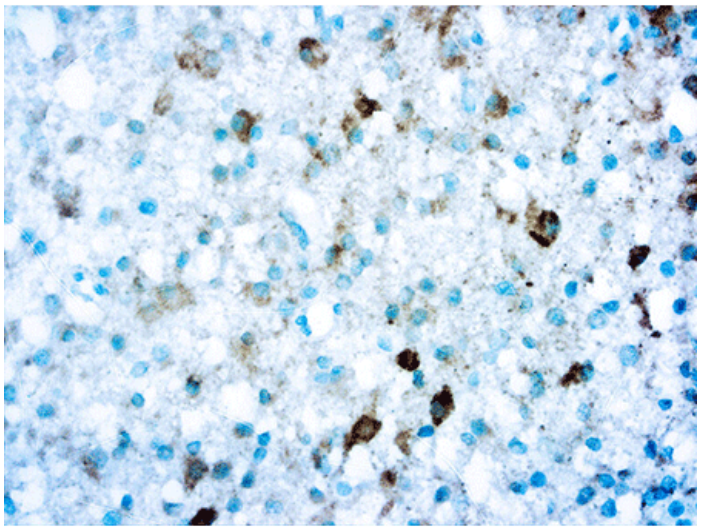
Ordering Information

Order Online »

ENZ-ABS854-1000	1ml
ENZ-ABS854-0100	100µl

Manuals, SDS & CofA

View Online »



Formalin fixed paraffin embedded anaplastic oligodendroglioma stained with IDH1 antibody

Handling & Storage

Long Term Storage	+4°C
Shipping	Blue Ice

Regulatory Status

RUO - Research Use Only

Product Details

Alternative Name	Isocitrate dehydrogenase 1
Application	IHC (PS)
Application Notes	Pretreatment: Tris/EDTA Buffer pH 9.0
Clone	SMab-1
Formulation	This product is supplied as a purified tissue culture supernatant and contains sodium azide as a preservative.
Host	Mouse
Immunogen	KLH-conjugated linear peptide corresponding to human Isocitrate Dehydrogenase 1 (IDH1)-R132S
Isotype	IgG1k
Positive Control	Human Glioma tissue
Recommendation Dilutions/Conditions	Antibody dilutions should be appropriately adjusted and verified according to the detection system used.Optimal conditions must be determined individually for each application.
Species Reactivity	Human
Worry-free Guarantee	**This antibody is covered by our Worry-Free Guarantee .**

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