

## Product datasheet for **TA327310S**

### Isocitrate dehydrogenase (IDH1) Rabbit Polyclonal Antibody

#### Product data:

Product Type:	Primary Antibodies
Applications:	ICC/IF, WB
Recommended Dilution:	WB 1:500 - 1:2000;IF 1:50 - 1:200
Reactivity:	Human, Mouse, Rat, Monkey
Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Immunogen:	Recombinant protein of human IDH1
Formulation:	Store at -20C or -80C. Avoid freeze / thaw cycles. Buffer: PBS with 0.02% sodium azide, 50% glycerol, pH7.3
Concentration:	lot specific
Purification:	Affinity purification
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Gene Name:	isocitrate dehydrogenase (NADP(+)) 1, cytosolic
Database Link:	<a href="#">NP_005887</a> <a href="#">Entrez Gene 15926 Mouse</a> <a href="#">Entrez Gene 24479 Rat</a> <a href="#">Entrez Gene 710019 Monkey</a> <a href="#">Entrez Gene 3417 Human</a> <a href="#">O75874</a>



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**Background:**

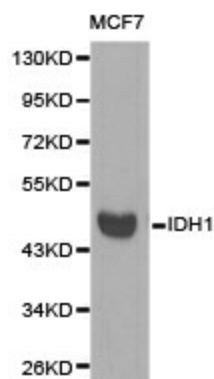
IDH1 is one of three isocitrate dehydrogenases that catalyze the oxidative decarboxylation of isocitrate to  $\alpha$ -ketoglutarate ( $\alpha$ -KG). These enzymes exist in two distinct subclasses that utilize either NAD or NADP<sup>+</sup> respectively, as an electron acceptor. IDH1 is the NADP<sup>+</sup>-dependent isocitrate dehydrogenase found in the cytoplasm and peroxisomes. IDH2 and 3 are mitochondrial enzymes that also function in the Krebs cycle. IDH1 is inactivated by phosphorylation at Ser113 and contains a clasp-like domain wherein both polypeptide chains in the dimer interlock. IDH1 is expressed in a wide range of species and also in organisms that lack a complete citric acid cycle. 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.

**Synonyms:**

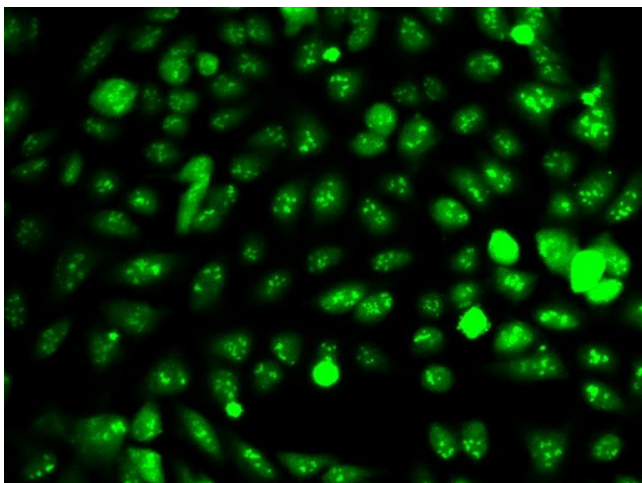
HEL-216; HEL-S-26; IDCD; IDH; IDP; IDPC; PICD

**Protein Pathways:**

Citrate cycle (TCA cycle), Glutathione metabolism, Metabolic pathways

**Product images:**

Western blot analysis of extracts of MCF7 cell lines, using IDH1 antibody.



Immunofluorescence analysis of HeLa cell using IDH1 antibody.