

Datasheet for ABIN1421647

**anti-IDH1 antibody (AA 70-115) (Cy5.5)**[Go to Product page](#)

## Overview

|                      |                                                                                 |
|----------------------|---------------------------------------------------------------------------------|
| Quantity:            | 100 µL                                                                          |
| Target:              | IDH1                                                                            |
| Binding Specificity: | AA 70-115                                                                       |
| Reactivity:          | Human, Mouse, Rat                                                               |
| Host:                | Rabbit                                                                          |
| Clonality:           | Polyclonal                                                                      |
| Conjugate:           | This IDH1 antibody is conjugated to Cy5.5                                       |
| Application:         | Western Blotting (WB), Immunofluorescence (Paraffin-embedded Sections) (IF (p)) |

## Product Details

|                   |                                                                                   |
|-------------------|-----------------------------------------------------------------------------------|
| Immunogen:        | KLH conjugated synthetic peptide derived from human IDH1/Isocitrate dehydrogenase |
| Isotype:          | IgG                                                                               |
| Cross-Reactivity: | Human, Mouse, Rat                                                                 |
| Purification:     | Purified by Protein A.                                                            |

## Target Details

|                   |                                                                                                                                                            |
|-------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Target:           | IDH1                                                                                                                                                       |
| Alternative Name: | IDH1 ( <a href="#">IDH1 Products</a> )                                                                                                                     |
| Background:       | Synonyms: Cytosolic NADP isocitrate dehydrogenase, Cytosolic NADP-isocitrate dehydrogenase, ICDH, IDCD, IDH, IDHC, Idh1, IDHC_HUMAN, IDP, IDPC, Isocitrate |

## Target Details

dehydrogenase [NADP] cytoplasmic, Isocitrate dehydrogenase 1 NADP+ soluble, NADP dependent isocitrate dehydrogenase cytosolic, NADP dependent isocitrate dehydrogenase peroxisomal, NADP+-specic ICDH, Oxalosuccinate decarboxylase, PICD.

Background: The Isocitrate dehydrogenase cytoplasmic enzyme is a homodimer of 416 residues that belongs to the isocitrate and isopropylmalate dehydrogenases family. IDHC catalyzes the third step of the citric acid cycle, which involves the oxidative decarboxylation of isocitrate, forming  $\alpha$ -ketoglutarate and CO<sub>2</sub> 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  $\alpha$ -ketoglutarate. During this process, either NADH or NADPH is produced along with CO<sub>2</sub>. Ca<sup>2+</sup> can bind to IDHC as a complex with isocitrate, acting as a competitive inhibitor of Mg<sup>2+</sup>. The IDHC enzyme is inactivated by phosphorylation at Ser-113 and contains a clasp-like domain wherein both polypeptide chains in the dimer interlock. IDHC is expressed in a wide range of species and also in organisms that lack a complete citric acid cycle.

Gene ID: 3417

UniProt: [O75874](#)

Pathways: [Warburg Effect](#)

## Application Details

Application Notes: IF(IHC-P) 1:50-200

Restrictions: For Research Use only

## Handling

Format: Liquid

Concentration: 1 µg/µL

Buffer: Aqueous buffered solution containing 0.01M TBS ( pH 7.4) with 1 % BSA, 0.03 % Proclin300 and 50 % Glycerol.

Preservative: ProClin

Precaution of Use: This product contains ProClin: a POISONOUS AND HAZARDOUS SUBSTANCE, which should be handled by trained staff only.

Storage: -20 °C

Storage Comment: Store at -20°C. Aliquot into multiple vials to avoid repeated freeze-thaw cycles.

Handling

---

Expiry Date: 12 months