

IDH2 (H-40): sc-134923

BACKGROUND

IDH2 (isocitrate dehydrogenase 2 (NADP⁺), mitochondrial), also designated NADP⁺-specific ICDH; isocitrate dehydrogenase, mitochondrial; and oxalosuccinate decarboxylase, is a 452 amino acid enzyme encoded by the human gene IDH2. IDH2 belongs to the isocitrate and isopropylmalate dehydrogenases family and contains two nucleotide binding regions. IDH2 is involved in the reduction of NADP⁺ to NADPH and maintains the supply of glutathione (GSH) in mitochondria. It is believed to play a role in intermediary metabolism and energy production. IDH2 also tightly associates with the pyruvate dehydrogenase complex. IDH2 is found in the mitochondrion as a homodimer and can bind one magnesium or manganese ion per subunit.

CHROMOSOMAL LOCATION

Genetic locus: IDH2 (human) mapping to 15q26.1; Idh2 (mouse) mapping to 7 D3.

SOURCE

IDH2 (H-40) is a rabbit polyclonal antibody raised against amino acids 71-110 mapping within an internal region of IDH2 of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

APPLICATIONS

IDH2 (H-40) is recommended for detection of IDH2 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

IDH2 (H-40) is also recommended for detection of IDH2 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for IDH2 siRNA (h): sc-62487, IDH2 siRNA (m): sc-62488, IDH2 shRNA Plasmid (h): sc-62487-SH, IDH2 shRNA Plasmid (m): sc-62488-SH, IDH2 shRNA (h) Lentiviral Particles: sc-62487-V and IDH2 shRNA (m) Lentiviral Particles: sc-62488-V.

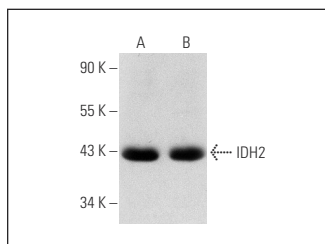
Molecular Weight of IDH2: 44 kDa.

Positive Controls: HEK293 whole cell lysate: sc-45136, mouse heart extract: sc-2254 or Caki-1 cell lysate: sc-2224.

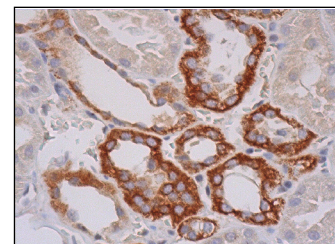
RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941. 4) Immunohistochemistry: use ImmunoCruz™: sc-2051 or ABC: sc-2018 rabbit IgG Staining Systems.

DATA



IDH2 (H-40): sc-134923. Western blot analysis of IDH2 expression in HEK293 (A) and Caki-1 (B) whole cell lysates.



IDH2 (H-40): sc-134923. Immunoperoxidase staining of formalin fixed, paraffin-embedded human kidney tissue showing cytoplasmic staining of cells in glomeruli.

SELECT PRODUCT CITATIONS

- Wang, Z.Q., et al. 2015. BCAT1 expression associates with ovarian cancer progression: possible implications in altered disease metabolism. Oncotarget. E-published.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.

MONOS
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Try **IDH1/2 (G-11): sc-373816** or **IDH2 (B-6): sc-374476**, our highly recommended monoclonal alternatives to IDH2 (H-40).