

IDI1 (H-66): sc-134693

BACKGROUND

IDI1 (isopentenyl-diphosphate δ isomerase 1), also known as IPP1 or IPP11, is a 227 amino acid member of the IPP isomerase type I family and is involved in cholesterol biosynthesis. Localized to the peroxisome, IDI1 catalytically converts isopentenyl diphosphate (IPP) to its electrophilic isomer, dimethylallyl diphosphate (DMAPP). Specifically, IDI1 uses magnesium as a cofactor to catalyze the 1,3-allylic rearrangement of IPP, thus creating DMAPP, a substrate for subsequent reactions that synthesize farnesyl diphosphate and, ultimately, cholesterol. Defects in the gene encoding IDI1 may be associated with peroxisomal deficiency diseases, such as Zellweger syndrome, a congenital disorder caused by a reduction in the number of peroxisomes. Individuals affected with this disorder generally exhibit lack of muscle tone, an enlarged liver, mental retardation and, in some cases, death.

REFERENCES

1. Xuan, J.W., Kowalski, J., Chambers, A.F. and Denhardt, D.T. 1994. A human promyelocyte mRNA transiently induced by TPA is homologous to yeast IPP isomerase. *Genomics* 20: 129-131.
2. Krisans, S.K., Ericsson, J., Edwards, P.A. and Keller, G.A. 1994. Farnesyl-diphosphate synthase is localized in peroxisomes. *J. Biol. Chem.* 269: 14165-14169.

CHROMOSOMAL LOCATION

Genetic locus: IDI1 (human) mapping to 10p15.3; Idi1 (mouse) mapping to 13 A1.

SOURCE

IDI1 (H-66) is a rabbit polyclonal antibody raised against amino acids 162-227 mapping at the C-terminus of IDI1 of human origin.

PRODUCT

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

APPLICATIONS

IDI1 (H-66) is recommended for detection of IDI1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

IDI1 (H-66) is also recommended for detection of IDI1 in additional species, including equine and canine.

Suitable for use as control antibody for IDI1 siRNA (h): sc-90838, IDI1 siRNA (m): sc-146141, IDI1 shRNA Plasmid (h): sc-90838-SH, IDI1 shRNA Plasmid (m): sc-146141-SH, IDI1 shRNA (h) Lentiviral Particles: sc-90838-V and IDI1 shRNA (m) Lentiviral Particles: sc-146141-V.

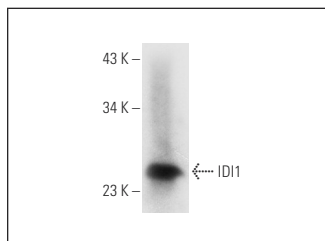
Molecular Weight of IDI1: 26 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200 or human stomach extract: sc-363780.

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.

DATA



IDI1 (H-66): sc-134693. Western blot analysis of IDI1 expression in human stomach tissue extract.

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.

PROTOCOLS

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

MONOS
Satisfaction
Guaranteed

Try **IDI1 (XY-7): sc-100550**, our highly recommended monoclonal alternative to IDI1 (H-66).