SANTA CRUZ BIOTECHNOLOGY, INC.

DIO1 (H-76): sc-98392

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

DIO1 (deiodinase, iodothyronine, type I), also known as TXDI1, ITDI1 or 5DI, is a 249 amino acid single-pass membrane protein that localizes to the endoplasmic reticulum and belongs to the iodothyronine deiodinase family. Expressed as nine alternatively spliced isoforms, DIO1 functions as a thiol-dependent propylthiouracil-sensitive oxidoreductase that converts the prohormone thyroxine (T4) to bioactive 3,3',5-triiodothyronine (T3), thereby playing a role in thyroid hormone (TH) activation. Human DIO1 shares 88% sequence similarity with its rat counterpart, suggesting a conserved role between species. The gene encoding DIO1 maps to human chromosome 1, which spans 260 million base pairs, contains over 3,000 genes and comprises nearly 8% of the human genome.

REFERENCES

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RESEARCH USE

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

CHROMOSOMAL LOCATION

Genetic locus: DIO1 (human) mapping to 1p32.3; Dio1 (mouse) mapping to 4 C7.

SOURCE

DIO1 (H-76) is a rabbit polyclonal antibody raised against amino acids 174-249 mapping at the C-terminus of DIO1 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.

APPLICATIONS

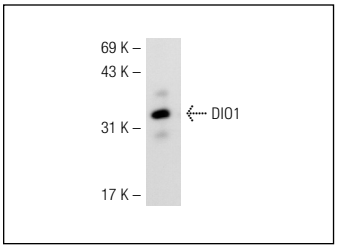
DIO1 (H-76) is recommended for detection of DIO1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

DIO1 (H-76) is also recommended for detection of DIO1 in additional species, including porcine.

Suitable for use as control antibody for DIO1 siRNA (h): sc-77146, DIO1 siRNA (m): sc-77147, DIO1 shRNA Plasmid (h): sc-77146-SH, DIO1 shRNA Plasmid (m): sc-77147-SH, DIO1 shRNA (h) Lentiviral Particles: sc-77146-V and DIO1 shRNA (m) Lentiviral Particles: sc-77147-V.

Molecular Weight of DIO1: 28 kDa.

DATA



DIO1 (H-76): sc-98392. Western blot analysis of DIO1 expression in 293T whole cell lysate.

STORAGE

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

MONOS Satisfaction Guaranteed

Try **DIO1 (B-7): sc-515198**, our highly recommended monoclonal alternative to DIO1 (H-76).