

INDOL1 (m): 293T Lysate: sc-121063

BACKGROUND

Tryptophan is an essential amino acid that is necessary for protein synthesis, serotonin and melatonin biosynthesis and energy production; energy being a product of the catabolism of tryptophan through the kynurenine pathway. The kynurenine pathway has many downstream metabolites which may be a part of physiological or patho-physiological processes. INDOL1 (indoleamine 2,3-dioxygenase-like protein 1) is an enzyme that catalyzes the first step of the kynurenine pathway of tryptophan metabolism. INDOL1 is also known as IDO2 (indoleamine 2,3-dioxygenase 2) and is a 407 amino acid protein that is expressed in various tissues, including liver, small intestine, spleen, placenta, thymus, lung, brain, kidney, colon and dendritic cells. INDOL1 is selectively inhibited by D-1MT (1-methyl-d-tryptophan), which also inhibits IDO (indoleamine 2,3-dioxygenase) and is significant because IDO expression causes suppression of T cell responses to tumors in dendritic cells. The inhibition of INDOL1 by D-1MT suggests a common function in immunomodulation. In the human INDOL1 gene, two single nucleotide polymorphisms have been detected which abolish the enzymatic function of INDOL1.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: *Ido2* (mouse) mapping to 8 A2.

PRODUCT

INDOL1 (m): 293T Lysate represents a lysate of mouse INDOL1 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

APPLICATIONS

INDOL1 (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive INDOL1 antibodies. Recommended use: 10-20 µl per lane.

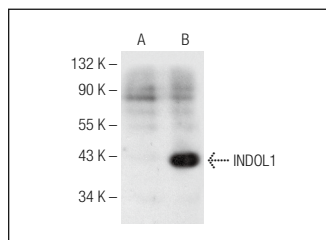
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

INDOL1 (C-9): sc-374159 is recommended as a positive control antibody for Western Blot analysis of enhanced mouse INDOL1 expression in INDOL1 transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:
1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

DATA



INDOL1 (C-9): sc-374159. Western blot analysis of INDOL1 expression in non-transfected: sc-117752 (A) and mouse INDOL1 transfected: sc-121063 (B) 293T whole cell lysates.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. 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 for detailed protocols and support products.