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SANTA CRUZ BIOTECHNOLOGY, INC.

TRP2 (h3): 293T Lysate: sc-172779

BACKGROUND

Tyrosinase (TYR), a type I membrane protein and copper-containing enzyme, is involved in the production of melanin, the primary pigment found in vertebrates. Melanin biogenesis requires the enzymatic activity of TYR, which catalyzes the critical and rate-limiting step of tyrosine hydroxylation in the biosynthesis of melanin. Defects effecting TYR activity result in various forms of albinism. The TYR-related proteins, TRP1 and TRP2, are also specifically expressed in melanocytes, and they likewise contribute to the synthesis of melanin within the melanosomes. The TRPs, including TYR, all share a similar transmembrane region, contain two metal-binding regions and a cysteine-rich epidermal growth factor motif, and are localized in the melanosomal membrane. These proteins, however, have distinct catalytic activity, and they individually contribute to the biosynthesis of melanin biopolymers. The TRPs are believed to exist as a multi-enzyme complex, as these proteins form aggregates together, and the expression of TRP1 also helps stabilize TYR in melanocytes.

REFERENCES

1. Korner, A. and Pawelek, J. 1982. Mammalian tyrosinase catalyzes three reactions in the biosynthesis of melanin. Science 217: 1163-1165.
2. Shibahara, S., Tomita, Y., Sakakura, T., Nager, C., Chaudhuri, B. and Müller, R. 1986. Cloning and expression of cDNA encoding mouse tyrosinase. Nucleic Acids Res. 14: 2413-2427.
3. Hearing, V.J. and Jiménez, M. 1987. Mammalian tyrosinase — the critical regulatory control point in melanocyte pigmentation. Int. J. Biochem. 19: 1141-1147.
4. Tripathi, R.K., Hearing, V.J., Urabe, K., Aroca, P. and Spritz, R.A. 1992. Mutational mapping of the catalytic activities of human tyrosinase. J. Biol. Chem. 267: 23707-23712.
5. Tsukamoto, K., Jackson, I.J., Urabe, K., Montague, P.M. and Hearing, V.J. 1992. A second tyrosinase-related protein, TRP-2, is a melanogenic enzyme termed DOPAchrome tautomerase. EMBO J. 11: 519-526.
6. Bouchard, B., Del Marmol, V., Jackson, I.J., Cherif, D. and Dubertret, L. 1994. Molecular characterization of a human tyrosinase-related-protein-2 cDNA. Patterns of expression in melanocytic cells. Eur. J. Biochem. 219: 127-134.
7. Orlow, S.J., Zhou, B.K., Chakraborty, A.K., Drucker, M., Pifko-Hirst, S. and Pawelek, J.M. 1994. High-molecular-weight forms of tyrosinase and the tyrosinase-related proteins: evidence for a melanogenic complex. J. Invest. Dermatol. 103: 196-201.
8. Jimenez-Cervantes, C., Martínez-Esparza, M., Solano, F., Lozano, J.A. and García-Borrón, J.C. 1998. Molecular interactions within the melanogenic complex: formation of heterodimers of tyrosinase and TRP1 from B16 mouse melanoma. Biochem. Biophys. Res. Commun. 253: 761-767.

CHROMOSOMAL LOCATION

Genetic locus: DCT (human) mapping to 3q11.2.

RESEARCH USE

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

PRODUCT

TRP2 (h3): 293T Lysate represents a lysate of human TRP2 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

APPLICATIONS

TRP2 (h3): 293T Lysate is suitable as a Western Blotting positive control for human reactive TRP2 antibodies. Recommended use: 10-20 µl per lane.

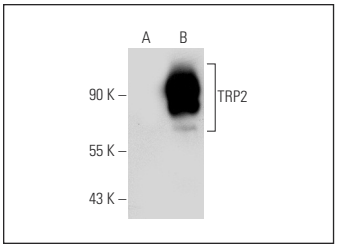
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

TRP2 (C-9): sc-74439 is recommended as a positive control antibody for Western Blot analysis of enhanced human TRP2 expression in TRP2 transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

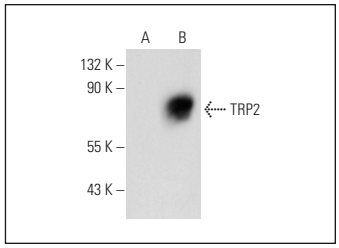
RECOMMENDED SUPPORT REAGENTS

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



TRP2 (C-9): sc-74439. Western blot analysis of TRP2 expression in non-transfected: sc-117752 (**A**) and human TRP2 transfected: sc-172779 (**B**) 293T whole cell lysates.



TRP2 (F-9): sc-166717. Western blot analysis of TRP2 expression in non-transfected: sc-117752 (**A**) and human TRP2 transfected: sc-113802 (**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.

PROTOCOLS

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