

Anti-TRP2/DCT Antibody Picoband™

Catalog Number: A01830-3

About DCT

Dopachrome tautomerase (dopachrome delta-isomerase, tyrosine-related protein 2), also known as DCT, is a human gene. 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.

Overview

Product Name	Anti-TRP2/DCT Antibody Picoband™
Reactive Species	Human, Mouse, Rat
Description	Boster Bio Anti-TRP2/DCT Antibody Picoband™ catalog # A01830-3. Tested in ELISA, Flow Cytometry, WB applications. This antibody reacts with Human, Mouse, Rat.
Application	ELISA, Flow Cytometry, WB
Clonality	Polyclonal
Formulation	Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na ₂ HPO ₄ .
Storage Instructions	At -20°C for one year from date of receipt. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for six months. Avoid repeated freezing and thawing.
Host	Rabbit
Uniprot ID	P40126

Technical Details

Immunogen	E.coli-derived human TRP2/DCT recombinant protein (Position: Q24-A519).
Predicted Reactive Species	Human
Recommended Detection Systems	Boster recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG (EK1002) for Western blot.
Cross Reactivity	No cross-reactivity with other proteins.
Isotype	Rabbit IgG
Form	Lyophilized

Concentration	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml.
Purification	Immunogen affinity purified.
Suggested Dilutions	Dilute the sample so that the expected range of concentrations fall within the detection range of this kit. If the expected range of concentration is unknown, a pilot test should be conducted to decide the optimal dilution ratio for your samples. Some PubMed article(s) citing the expression level of this target are as follows: Boster Bio's internal QC testing used: Western blot, 0.25-0.5 ug/ml, Mouse, Rat Flow Cytometry, 1-3 ug/1x10⁶ cells, Human Direct ELISA, 0.1-0.5 ug/ml, Human

Anti-TRP2/DCT Antibody Picoband™ (A01830-3) Images

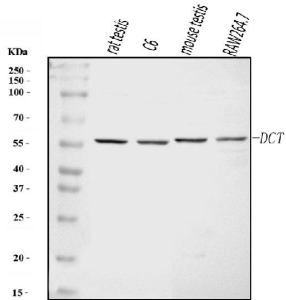


Figure 1. Western blot analysis of TRP2/DCT using anti-TRP2/DCT antibody (A01830-3).

Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: rat testis tissue lysates,

Lane 2: rat C6 whole cell lysates,

Lane 3: mouse testis tissue lysates,

Lane 4: mouse RAW264.7 whole cell lysates.

After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes.

Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-TRP2/DCT antigen affinity purified polyclonal antibody (Catalog # A01830-3) at 0.5 ug/mL overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:5000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for TRP2/DCT at approximately 59 kDa. The expected band size for TRP2/DCT is at 59 kDa.

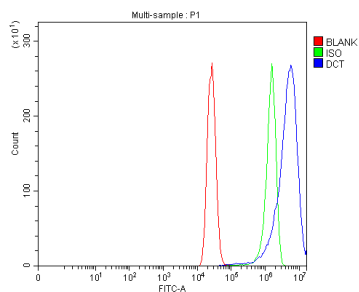


Figure 2. Flow Cytometry analysis of MCF-7 cells using anti-TRP2/DCT antibody (A01830-3).

Overlay histogram showing MCF-7 cells stained with A01830-3 (Blue line). The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-TRP2/DCT Antibody (A01830-3, 1 ug/1x10⁶ cells) for 30 min at 20°C. DyLight®488 conjugated goat anti-rabbit IgG (BA1127, 5-10 ug/1x10⁶ cells) was used as secondary antibody for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG (1 ug/1x10⁶) used under the same conditions. Unlabelled sample (Red line) was also used as a control.

Submit a product review to Biocompare.com

Submit a review of this product to Biocompare.com to receive a \$20 Amazon.com giftcard! Your reviews help your fellow scientists make the right decisions. Thank you for your contribution.



Anti-TRP2/DCT Antibody