SANTA CRUZ BIOTECHNOLOGY, INC.

Retinal RX (m2): 293T Lysate: sc-123076

BACKGROUND

The homeobox DNA-binding domain is a 60 amino acid motif that is conserved among many species and functions to bind DNA via a helix-turn-helix structure, thereby playing a role in transcriptional regulation and the control of gene expression. Retinal RX, also known as RAX (retina and anterior neural fold homeobox), MCOP3 or RX, is a 346 amino acid protein that localizes to the nucleus and contains one OAR domain and one homeobox DNA-binding domain. Expressed in developing eye tissue, as well as in adult retina tissue, Retinal RX plays a crucial role in eye formation, specifically by regulating the specification and proliferation of retinal cells. Defects in the gene encoding Retinal RX are the cause of microphthalmia isolated type 3 (MCOP3), a heterogeneous disorder that is characterized by opacities of the cornea and lens and scaring of the retina and choroid.

REFERENCES

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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.

CHROMOSOMAL LOCATION

Genetic locus: Rax (mouse) mapping to 18 E1.

PRODUCT

Retinal RX (m2): 293T Lysate represents a lysate of mouse Retinal RX transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

APPLICATIONS

Retinal RX (m2): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive Retinal RX antibodies. Recommended use: 10-20 µl per lane.

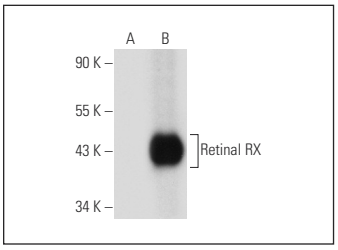
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

Retinal RX (G-12): sc-271889 is recommended as a positive control antibody for Western Blot analysis of enhanced mouse Retinal RX expression in Retinal RX 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



Retinal RX (G-12): sc-271889. Western blot analysis of Retinal RX expression in non-transfected: sc-117752 (**A**) and mouse Retinal RX transfected: sc-123076 (**B**) 293T whole cell lysates.

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.