SANTA CRUZ BIOTECHNOLOGY, INC.

REDD-1 (h): 293 Lysate: sc-111360

BACKGROUND

REDD-1, also designated DNA-damage-inducible transcript 4, dig2 or RTP801, is thought to function in the regulation of reactive oxygen species (ROS). REDD-1 expression has also been linked to apoptosis, Aβ toxicity and the pathogenesis of ischemic diseases. As an HIF-1-responsive gene, REDD-1 exhibits strong hypoxia-dependent upregulation in ischemic cells of neuronal origin. In response to stress due to DNA damage and glucocorticoid treatment, REDD-1 is upregulated at the transcriptional level. REDD-1 negatively regulates the mammalian target of Rapamycin (mTOR), a serine/threonine kinase often referred to as FRAP. It is crucial in the coupling of extra- and intracellular cues to FRAP regulation. The absence of REDD-1 is associated with the development of retinopathy, a major cause of blindness.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: DDIT4 (human) mapping to 10q22.1.

PRODUCT

REDD-1 (h): 293 Lysate represents a lysate of human REDD-1 transfected 293 cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

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.

APPLICATIONS

REDD-1 (h): 293 Lysate is suitable as a Western Blotting positive control for human reactive REDD-1 antibodies. Recommended use: 10-20 µl per lane.

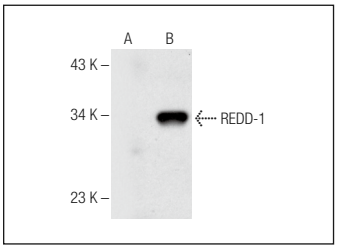
Control 293 Lysate: sc-110760 is available as a Western Blotting negative control lysate derived from non-transfected 293 cells.

REDD-1 (B-3): sc-376671 is recommended as a positive control antibody for Western Blot analysis of enhanced human REDD-1 expression in REDD-1 transfected 293 cells (starting dilution 1:100, dilution range 1:100-1:1,000).

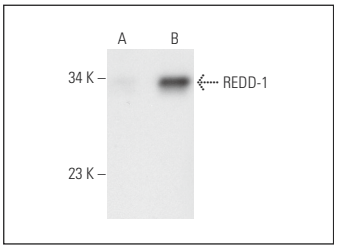
RECOMMENDED SUPPORT REAGENTS

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



REDD-1 (B-3): sc-376671. Western blot analysis of REDD-1 expression in non-transfected: sc-110760 (**A**) and human REDD-1 transfected: sc-111360 (**B**) 293 whole cell lysates.



REDD-1 (A-4): sc-271158. Western blot analysis of REDD-1 expression in non-transfected: sc-110760 (**A**) and human REDD-1 transfected: sc-111360 (**B**) 293 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.