

RPE (h): 293T Lysate: sc-111455

BACKGROUND

RPE (ribulose-5-phosphate-3-epimerase), also known as RPE2-1, is a 228 amino acid protein belonging to the ribulose phosphate binding superfamily. Ubiquitously expressed but found in highest levels in red blood cells, lymphocytes and fibroblasts, RPE exists as two alternatively spliced isoforms and is encoded by a gene located on human chromosome 2, which houses over 1,400 genes and comprises nearly 8% of the human genome. Harlequin ichthyosis, a rare and morbid skin deformity, is associated with mutations in the ABCA12 gene, while the lipid metabolic disorder sitosterolemia is associated with defects in the ABCG5 and ABCG8 genes. Additionally, an extremely rare recessive genetic disorder, Alström syndrome, is caused by mutations in the ALMS1 gene, which maps to chromosome 2.

REFERENCES

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3. Dallapiccola, B., et al. 1988. Deletion 2q31.3—2q33.3: gene dosage effect of ribulose 5-phosphate 3-epimerase. *Hum. Genet.* 79: 92.
4. Ijdo, J.W., et al. 1991. Origin of human chromosome 2: an ancestral telomere-telomere fusion. *Proc. Natl. Acad. Sci. USA* 88: 9051-9055.
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CHROMOSOMAL LOCATION

Genetic locus: RPE (human) mapping to 2q34.

PRODUCT

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

APPLICATIONS

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

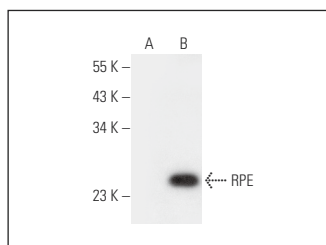
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

RPE (F-10): sc-393655 is recommended as a positive control antibody for Western Blot analysis of enhanced human RPE expression in RPE 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



RPE (F-10): sc-393655. Western blot analysis of RPE expression in non-transfected: sc-117752 (A) and human RPE transfected: sc-111455 (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.