

# RPE-J Whole Cell Lysate: sc-24771

## BACKGROUND

Santa Cruz Biotechnology offers a variety of whole cell lysates for use in combination with our antibodies as Western Blotting controls. RPE-J Whole Cell Lysate is derived from the RPE-J cell line using a procedure that ensures protein integrity and lot-to-lot reproducibility. All lysates are tested by Western Blotting to assure that each one contains the expected concentration and assortment of proteins. Numerous antibodies directed against a wide array of mammalian proteins are used to test each lysate.

RPE-J is a retinal pigment epithelial (RPE) cell line derived from primary cultures of RPE cells taken from 7 day old Long-Evans rats. The cells were transformed at 33° C with the temperature-sensitive tsA SV40 virus, and cloned by limiting dilution. The RPE-J clone was selected for an epithelioid morphology and for expression of circumferential staining with antibody against the tight junction protein 1, (Tjp1, ZO-1). RPE-J is the only established RPE cell line that maintains epithelial cell surface polarity. The cells retain many properties of RPE including expression of the rat RPE marker RET-PE2 and the ability to phagocytose latex beads.

## REFERENCES

1. Nabi, I.R., Mathews, A.P., Cohen-Gould, L., Gundersen, D. and Rodriguez-Boulan, E. 1993. Immortalization of polarized rat retinal pigment epithelium. *J. Cell. Sci.* 104 (Pt. 1): 37-49.

## SOURCE

RPE-J Whole Cell Lysate is derived from the RPE-J cell line.

Organism:	<i>Rattus norvegicus</i> (rat)
Organ:	Eye
Strain:	Long-Evans
Tissue:	Retinal pigmented epithelium; retina
Disease:	Normal
Cell Type:	Epithelial SV40 transformed

## PRODUCT

Each vial contains 500 µg protein in 200 µl of an SDS-PAGE Western Blotting buffer, which consists of 100 µl RIPA Lysis Buffer and 100 µl Electrophoresis Buffer, 2X.

## APPLICATIONS

RPE-J Whole Cell Lysate is provided as a Western Blotting positive control. Recommended use is 50 µg (20 µl) per lane. Sample vial should be boiled once prior to use.

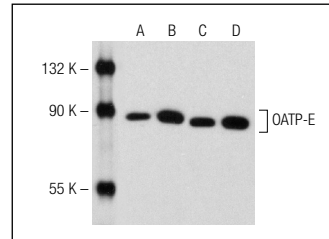
## PREPARATION METHOD

Cells are cultured with appropriate media conditions and allowed to reach a confluency of 75%. Cells are lysed using the RIPA Lysis Buffer System (sc-24948). The BCA Protein Assay Kit (sc-202389) is used to determine the total protein concentration. The lysate is adjusted to contain 500 µg of total cellular protein in 100 µl before adding an equal volume of Electrophoresis Sample Buffer, 2X (sc-24945). Final concentration of product is 500 µg total protein in a final volume of 200 µl.

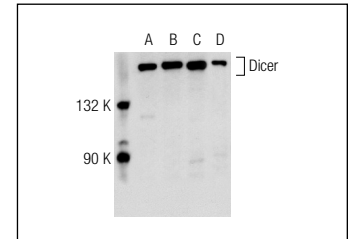
## STORAGE

Store at -20° C; stable for one year from the date of shipment. Non-hazardous. No MSDS required. Minimize repeated freezing and thawing.

## DATA



OATP-E (E-19): sc-51167. Western blot analysis of OATP-E expression in NIH/3T3 (A), RPE-J (B), RAW 264.7 (C) and EOC 20 (D) whole cell lysates.



Dicer (F-10): sc-136979. Western blot analysis of Dicer expression in AMJ2-C11 (A), NIH/3T3 (B), RPE-J (C) and KNrk (D) whole cell lysates.

## RESEARCH USE

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

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.