

R1 (h): 293T Lysate: sc-171262

BACKGROUND

Ribonucleotide reductase is essential for the production and maintenance of the level of deoxyribonucleoside triphosphates (dNTPs) required for DNA synthesis. It is an enzymatic complex consisting of two nonidentical subunits, R1 and R2, which are inactive separately. R1, the larger subunit, contains allosteric regulatory sites in a human breast carcinoma cell line. R2 is the limiting factor of the catalytic activity of the ribonucleotide reductase enzymatic complex. R2 expression is strictly correlated to the S-phase of the cell cycle, whereas R1 remains constant throughout all phases of the cell cycle. Ribonucleotide reductase appears to be specifically involved in nucleotide excision repair, since both the R1 and R2 subunits are induced in response to UV light in a dose-dependent manner.

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: RRM1 (human) mapping to 11p15.4.

PRODUCT

R1 (h): 293T Lysate represents a lysate of human R1 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

APPLICATIONS

R1 (h): 293T Lysate is suitable as a Western Blotting positive control for human reactive R1 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.

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.