ERCC1 (8F1): sc-56673

BACKGROUND
Xeroderma pigmentosum (XP) is an autosomal recessive disorder characterized by a genetic predisposition to sunlight-induced skin cancer, it is commonly due to deficiencies in DNA repair enzymes. The most frequent mutations are found in the XP genes from group A through G and group V, which encode for nucleotide excision repair proteins. XPF, which is also designated ERCC4 or ERCC11, associates directly with the excision repair cross-complementing 1 (ERCC1) factor. ERCC-1, a functional homolog of Rad10 in S. cerevisiae, is a component of a structure-specific endonuclease that is responsible for 5' incisions during DNA repair. The ERCC1-XPF endonuclease preferentially cleaves one strand of DNA between duplex and single-stranded regions near borders of the stem-loop structure and, thereby, contributes to the initial steps of the nucleotide excision repair process.

CHROMOSOMAL LOCATION
Genetic locus: ERCC1 (human) mapping to 19q13.32; Ercc1 (mouse) mapping to 7 A3.

SOURCE
ERCC1 (8F1) is a mouse monoclonal antibody raised against full length ERCC1 of human origin.

PRODUCT
Each vial contains 50 µg IgG<sub>2a</sub> in 0.5 ml PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS
ERCC1 (8F1) is recommended for detection of ERCC1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for ERCC1 siRNA (h2): sc-270369, ERCC1 siRNA (m): sc-35332, ERCC1 shRNA Plasmid (h2): sc-270369-SH, ERCC1 shRNA Plasmid (m): sc-35332-SH, ERCC1 shRNA (h2) Lentiviral Particles: sc-270389-V and ERCC1 shRNA (m) Lentiviral Particles: sc-35332-V.

Molecular Weight of ERCC1: 38 kDa.

Positive Controls: A-431 whole cell lysate: sc-2201, SK-BR-3 nuclear extract: sc-2134 or ERCC1 (h): 293T lysate: sc-116554.

STORAGE
Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

PROTOCOLS
See our web site at www.scbt.com for detailed protocols and support products.

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

DATA

SELECT PRODUCT CITATIONS


See ERCC1 (D-10): sc-17800 for ERCC1 antibody conjugates, including AC, HRP, FITC, PE, and Alexa Fluor® 488, 546, 594, 647, 680 and 790.