**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. ERCC1, 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.

**REFERENCES**


**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 IgG2b 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 1:50-1:1500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for ERCC1 siRNA (h): sc-35331, ERCC1 siRNA (m): sc-35332, ERCC1 shRNA Plasmid (h): sc-35331-SH, ERCC1 shRNA Plasmid (m): sc-35332-SH, ERCC1 shRNA (h) Lentiviral Particles: sc-35331-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.

**DATA**

**SELECT PRODUCT CITATIONS**


**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.

**CONJUGATES**

See ERCC1 (D-10): sc-17809 for ERCC1 antibody conjugates, including AC, HRP, FITC, PE, Alexa Fluor® 488, Alexa Fluor® 594, Alexa Fluor® 647, Alexa Fluor® 680 and Alexa Fluor® 790.