ERCC1 (D-10): sc-17809

**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 (D-10) is a mouse monoclonal antibody raised against amino acids 1-297 representing full length DNA excision repair protein 1 (ERCC1) of human origin.

**PRODUCT**

Each vial contains 200 µg IgG2b, kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin. Also available as TransCruz reagent for Gel Supershift and ChIP applications, sc-17809 X, 200 µg/0.1 ml.

**APPLICATIONS**

ERCC1 (D-10) is recommended for detection of ERCC1 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:300), 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 (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.

**DATA**

ERCC1 (D-10) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of ERCC1: 38 kDa.

**SELECT PRODUCT CITATIONS**


**STORAGE**

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

**RESEARCH USE**

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