SANTA CRUZ BIOTECHNOLOGY, INC.

XPF (H-300): sc-28718

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Xeroderma pigmentosum (XP) is an autosomal recessive disorder characterized by a genetic predisposition to sunlight-induced skin cancer, and 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, is a protein that 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: ERCC4 (human) mapping to 16p13.12; Ercc4 (mouse) mapping to 16 A1.

SOURCE

XPF (H-300) is a rabbit polyclonal antibody raised against amino acids 1-300 mapping at the N-terminus of XPF of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

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.

APPLICATIONS

XPF (H-300) is recommended for detection of XPF 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

XPF (H-300) is also recommended for detection of XPF in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for XPF siRNA (h): sc-36855, XPF siRNA (m): sc-36856, XPF shRNA Plasmid (h): sc-36855-SH, XPF shRNA Plasmid (m): sc-36856-SH, XPF shRNA (h) Lentiviral Particles: sc-36855-V and XPF shRNA (m) Lentiviral Particles: sc-36856-V.

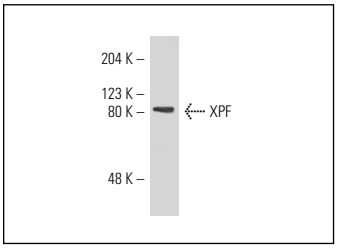
Molecular Weight of XPF: 112 kDa.

Positive Controls: HeLa nuclear extract: sc-2120 or KNRK nuclear extract: sc-2141.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



XPF (H-300): sc-28718. Western blot analysis of XPF expression in mouse testis tissue extract.

SELECT PRODUCT CITATIONS

1. Zhu, Q., et al. 2009. Chromatin restoration following nucleotide excision repair involves the incorporation of ubiquitinated H2A at damaged genomic sites. DNA Repair 8: 262-273.
2. Le May, N., et al. 2010. NER factors are recruited to active promoters and facilitate chromatin modification for transcription in the absence of exogenous genotoxic attack. Mol. Cell 38: 54-66.

PROTOCOLS

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