**BACKGROUND**

Damaged DNA binding protein (DDB) is a heterodimer composed of two subunits, p127 and p48, which are designated DDB1 and DDB2, respectively. The DDB heterodimer is involved in repairing DNA damaged by ultraviolet light. Specifically, DDB, also designated UV-damaged DNA binding protein (UV-DDB), xeroderma pigmentosum group E binding factor (XPE-BF) and hepatitis B virus X-associated protein 1 (XAP1), binds to damaged cyclobutane pyrimidine dimers (CPDs). Mutations in the DDB2 gene are implicated as causes of xeroderma pigmentosum group E, an autosomal recessive disease in which patients are defective in nucleotide excision DNA repair. XPE is characterized by hypersensitivity of the skin to sunlight with a high frequency of skin cancer as well as neurologic abnormalities. The hepatitis B virus (HBV) X protein interacts with DDB1, which may mediate HBx transactivation.

**REFERENCES**


**CHROMOSOMAL LOCATION**

Genetic locus: DDB1 (human) mapping to 11q12.2; Ddb1 (mouse) mapping to 19 A.

**SOURCE**

DDB1 (H-300) is a rabbit polyclonal antibody raised against amino acids 1-300 of DDB1 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.

**APPLICATIONS**

DDB1 (H-300) is recommended for detection of DDB1 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 DDB1 siRNA (h): sc-37797, DDB1 siRNA (m): sc-37798, DDB1 shRNA Plasmid (h): sc-37797-SH, DDB1 shRNA Plasmid (m): sc-37798-SH, DDB1 shRNA (h) Lentiviral Particles: sc-37797-V and DDB1 shRNA (m) Lentiviral Particles: sc-37798-V.

Molecular Weight of DDB1: 127 kDa.

Positive Controls: DDB1 (h): 293T Lysate: sc-116124, HeLa + UV irradiated cell lysate: sc-2221 or human platelet extract: sc-363773.

**STORAGE**

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

**DATA**

![Western blot analysis of DDB1 expression](image)

**SELECT PRODUCT CITATIONS**


**RESEARCH USE**

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

**PROTOCOLS**

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