



DDB1 Monoclonal Antibody

Product Code	CSB-MA202984
Storage	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.
Immunogen	Purified recombinant Human DDB1 protein fragments expressed in E.coli.
Raised In	Mouse
Species Reactivity	Human,Mouse,Rat,Monkey
Specificity	This antibody detects endogenous levels of DDB1 and does not cross-react with related proteins.
Tested Applications	ELISA,WB;Recommended dilution:WB:1:500-1:5000

Relevance

Required for DNA repair.Binds to DDB2 to form the UV-damaged DNA-binding protein complex (the UV-DDB complex).The UV-DDB complex may recognize UV-induced DNA damage and recruit proteins of the nucleotide excision repair pathway (the NER pathway) to initiate DNA repair.The UV-DDB complex preferentially binds to cyclobutane pyrimidine dimers (CPD),6-4 photoproducts (6-4 PP),apurinic sites and short mismatches.Also appears to function as a component of numerous distinct DCX (DDB1-CUL4-X-box) E3 ubiquitin-protein ligase complexes which mediate the ubiquitination and subsequent proteasomal degradation of target proteins.The functional specificity of the DCX E3 ubiquitin-protein ligase complex is determined by the variable substrate recognition component recruited by DDB1.DCX(DDB2) (also known as DDB1-CUL4-ROC1,CUL4-DDB-ROC1 and CUL4-DDB-RBX1) may ubiquitinate histone H2A,histone H3 and histone H4 at sites of UV-induced DNA damage.The ubiquitination of histones may facilitate their removal from the nucleosome and promote subsequent DNA repair.DCX(DDB2) also ubiquitinates XPC,which may enhance DNA-binding by XPC and promote NER.DCX(DTL) plays a role in PCNA-dependent polyubiquitination of CDT1 and MDM2-dependent ubiquitination of TP53 in response to radiation-induced DNA damage and during DNA replication.DCX(ERCC8) (the CSA complex) plays a role in transcription-coupled repair (TCR).May also play a role in ubiquitination of CDKN1B/p27kip when associated with CUL4 and SKP2.

Form	Ascites
Isotype	IgG2b
Clonality	Monoclonal
Alias	Damage specific DNA binding protein 1; Damage-specific DNA-binding protein 1; DDB 1; DDB p127 subunit; Ddb1; DDB1_HUMAN; DDBa; DNA damage binding protein 1; DNA damage-binding protein 1; DNA damage-binding protein a; HBV X-associated protein 1;
Product Type	Monoclonal Antibody
Immunogen Species	Homo sapiens (Human)