

Datasheet for ABIN7113313 **anti-DDB1 antibody**



[Go to Product page](#)

Overview

Quantity:	100 µg
Target:	DDB1
Reactivity:	Human, Mouse, Rat
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This DDB1 antibody is un-conjugated
Application:	Western Blotting (WB), ELISA, Immunohistochemistry (IHC), Immunofluorescence (IF)

Product Details

Immunogen:	damage-specific DNA binding protein 1, 127kDa
Clone:	3A0
Isotype:	IgG2a
Purification:	Protein A+G purification
Purity:	≥95 % as determined by SDS-PAGE

Target Details

Target:	DDB1
Alternative Name:	DDB1 (DDB1 Products)
Background:	Synonyms: DDB p127 subunit, DDB1, DDBA, DNA damage binding protein 1, DNA damage binding protein a, HBV X associated protein 1, UV damaged DNA binding factor, UV DDB 1, UV

Target Details

Background: 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.

Molecular Weight:	127 kDa
Gene ID:	1642
UniProt:	Q16531
Pathways:	DNA Damage Repair

Application Details

Application Notes:	WB: 1:500-1:2000, IHC: 1:200-1:800
Restrictions:	For Research Use only

Handling

Format:	Liquid
Buffer:	PBS with 0.02 % sodium azide and 50 % glycerol pH 7.3,
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which

Handling

should be handled by trained staff only.

Storage: -20 °C

Storage Comment: -20°C for 12 months (Avoid repeated freeze / thaw cycles.)

Expiry Date: 12 months