

DDB1 antibody

Product Information

Catalog No.:	FNab02285
Size:	100µg
Form:	liquid
Purification:	Protein A+G purification
Purity:	≥95% as determined by SDS-PAGE
Host:	Mouse
Clonality:	monoclonal
Clone ID:	3A0
IsoType:	IgG2a
Storage:	PBS with 0.02% sodium azide and 50% glycerol pH 7.3, -20°C for 12 months(Avoid repeated freeze / thaw cycles.)

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.

Immunogen information

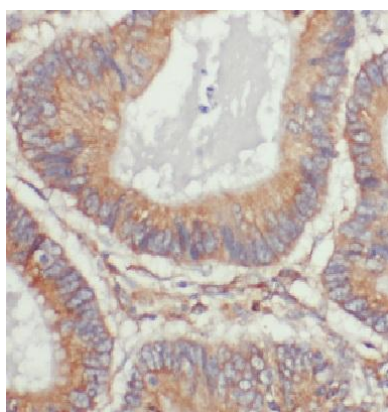
Immunogen: damage-specific DNA binding protein 1, 127kDa

Synonyms:	DNA damage-binding protein 1 DDB p127 subunit DNA damage-binding protein a (DDBa) Damage-specific DNA-binding protein 1 HBV X-associated protein 1 (XAP-1) UV-damaged DNA-binding factor UV-damaged DNA-binding protein 1 (UV-DDB 1) XPE-binding factor (XPE-BF) Xeroderma pigmentosum group E-complementing protein (XPCE) DDB1 XAP1
Observed MW:	127 kDa
Uniprot ID :	Q16531

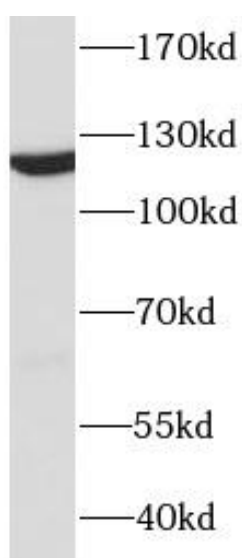
Application

Reactivity:	Human, Mouse, Rat
Tested Application:	ELISA, WB, IHC, IF
Recommended dilution:	WB: 1:500-1:2000; IHC: 1:200-1:800

Image:



Immunohistochemistry of paraffin-embedded human cervical cancer using FNab02285(DDB1 antibody) at dilution of 1:200



HeLa cells were subjected to SDS PAGE followed by western blot with FNab02285(DDB1 antibody) at dilution of 1:1000