Product Name: KD-Validated DDB1 Recombinant Rabbit Monoclonal Antibody
Catalog #: KVAb01730
For research use only.

Summary

Description	KO&KD-Validated antibody
Host	Rabbit
Application	WB,FCM,ICC
Reactivity	Human,Mouse,Rat
Conjugation	Unconjugated
Modification	Unmodified
Isotype	Rabbit IgG
Clonality	Rabbit mAb
Form	Liquid
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Supplied in PBS (pH 7.4) containing 50% glycerol, and 0.02% sodium azide.
Purification	Affinity purification

Application

Dilution Ratio	WB 1:10,000-1:50,000; FC 1:200-1:2,000; ICC 1:100-1:1,000
Molecular Weight	Calculated MW: 127.0kDa

Antigen Information

Gene Name	DDB1
Alternative Names	DDB1; Damage Specific DNA Binding Protein 1; Xeroderma Pigmentosum Group E-Complementing Protein ; UV-Damaged DNA-Binding Protein 1; UV-Damaged DNA-Binding Factor; DNA Damage-Binding Protein 1; DNA Damage-Binding Protein A; HBV X-Associated Protein 1; XPE-Binding Factor; DDB P127 Subunit; UV-DDB 1; XPE-BF; XAP-1; XAP1; Damage-Specific DNA Binding Protein 1 (127kD); Damage-Specific DNA Binding Protein 1, 127kDa; Damage-Specific DNA-Binding Protein 1; UV-DDB1; WHIKERS; DDBA; XPCE; DDBa; XPCe; XPE
Gene ID	1642.0
SwissProt ID	Q16531
Immunogen	A synthesized peptide derived from human DDB1

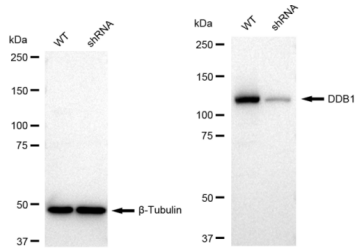
Background

The protein encoded by this gene is the large subunit (p127) of the heterodimeric DNA damage-binding (DDB) complex while another protein (p48) forms the small subunit. This protein complex functions in nucleotide-excision repair and binds to DNA following UV damage. Defective activity of this complex causes the repair defect in patients with xeroderma pigmentosum complementation group E (XPE) - an autosomal recessive disorder characterized by photosensitivity and early onset of carcinomas. However, it remains for mutation analysis to demonstrate whether the defect in XPE patients is in this gene or the gene encoding the small subunit. In addition, Best vitelliform mascular dystrophy is mapped to the same region as this gene on 11q, but no sequence alternations of this gene are demonstrated in Best disease patients. The protein encoded by this gene also functions as an adaptor molecule for the cullin 4 (CUL4) ubiquitin E3 ligase complex by facilitating the binding of substrates to this complex and the ubiquitination of proteins. [provided by RefSeq, May 2012]

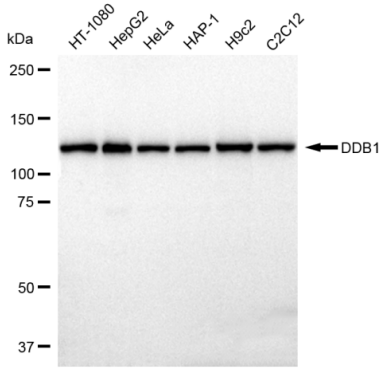
Research Area

Epigenetics and Nuclear Signaling

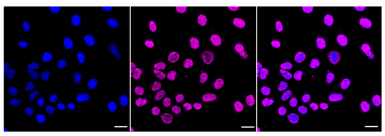
Image Data



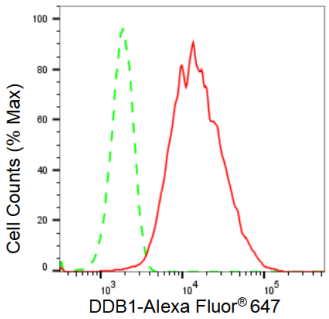
Western blotting analysis using DDB1 antibody (KVAb01730). DDB1 expression in wild type (WT) and DDB1 shRNA knockdown (KD) HeLa cells with 30 µg of total cell lysates. β-Tubulin serves as a loading control. The blot was incubated with DDB1 antibody (KVAb01730, 1:50,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



Western blotting analysis using DDB1 antibody (KVAb01730). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with DDB1 antibody (KVAb01730, 1:50,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively. DDB1, damage specific DNA binding protein 1.



Immunocytochemical staining of HepG2 cells with DDB1 antibody (KVAb01730, 1:1,000). Nuclei were stained blue with DAPI; DDB1 was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: Medium. Scale bar: 20 µm.



Flow cytometric analysis of DDB1 expression in HepG2 cells using DDB1 antibody (KVAb01730, 1:2,000). Green, isotype control; red, DDB1.