

Product Name: KD-Validated DDB2 Recombinant Rabbit Monoclonal Antibody**Catalog #: KVA01682**

For research use only.

Summary

Description	KO&KD-Validated antibody
Host	Rabbit
Application	WB,FCM,ICC,IHC-P
Reactivity	Human
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 1:1,000-1:5,000; FC 1:200-1:2,000; ICC 1:100-1:1,000; IHC-P 1:100-1:200
Molecular Weight	Calculated MW: 47.9kDa

Antigen Information

Gene Name	DDB2 DDB2; Damage Specific DNA Binding Protein 2; UV-Damaged DNA-Binding Protein 2; DDB P48 Subunit; UV-DDB2; DDBB; XPE; Xeroderma Pigmentosum Group E Protein; DNA
Alternative Names	Damage-Binding Protein 2; FLJ34321; Damage-Specific DNA Binding Protein 2 (48kD); Damage-Specific DNA Binding Protein 2, 48kDa; Damage-Specific DNA-Binding Protein 2; UV-DDB; DDBb
Gene ID	1643.0
SwissProt ID	Q92466
Immunogen	A synthesized peptide derived from human DDB2

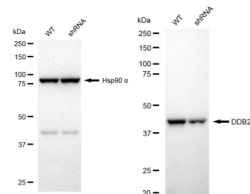
Background

This gene encodes a protein that is necessary for the repair of ultraviolet light-damaged DNA. This protein is the smaller subunit of a heterodimeric protein complex that participates in nucleotide excision repair, and this complex mediates the ubiquitylation of histones H3 and H4, which facilitates the cellular response to DNA damage. This subunit appears to be required for DNA binding. Mutations in this gene cause xeroderma pigmentosum complementation group E, a recessive disease that is characterized by an increased sensitivity to UV light and a high predisposition for skin cancer development, in some cases accompanied by neurological abnormalities. Two transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jul 2014]

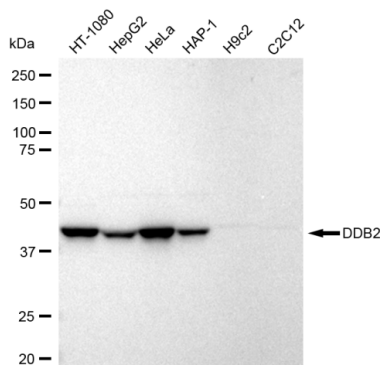
Research Area

Epigenetics and Nuclear Signaling

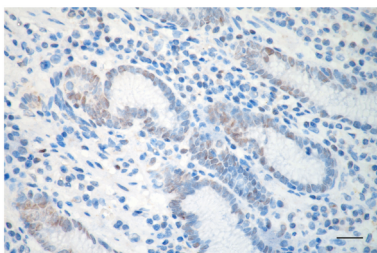
Image Data



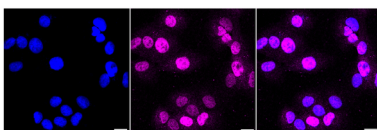
Western blotting analysis using DDB2 antibody (KVA01682). DDB2 expression in wild type (WT) and DDB2 shRNA knockdown (KD) HeLa cells with 30 µg of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with DDB2 antibody (KVA01682, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



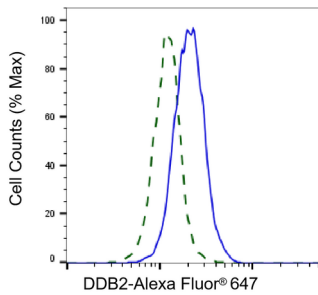
Western blotting analysis using DDB2 antibody (KVA01682). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with DDB2 antibody (KVA01682, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively. DDB2, damage specific DNA binding protein 2.



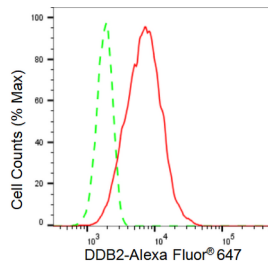
Immunohistochemistry was performed on paraffin-embedded human gastric carcinoma using DDB2 antibody (KVA01682, 1:200). Antigen retrieval was done in sodium citrate buffer (pH 6.0). DAB was used for detection, with hematoxylin counterstaining. Images were acquired using a Nikon Ci-L Plus microscope (40× objective). Scale bar: 25 µm.



Immunocytochemical staining of HT-1080 cells with DDB2 antibody (KVA01682, 1:1,000). Nuclei were stained blue with DAPI; DDB2 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.



Validation of DDB2 knockdown using flow cytometry. Wild-type(WT, Blue) and knockdown(KD, Green) HeLa cells were stained with DDB2 antibody (KVA01682, 1:2,000) and analyzed using BD flow cytometer.



Flow cytometric analysis of DDB2 expression in HT-1080 cells using DDB2 antibody (KVA01682, 1:2,000). Green, isotype control; red, DDB2.