

## Anti-DDB2 Rabbit Monoclonal Antibody Catalog # ABO15497

### Specification

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#### Anti-DDB2 Rabbit Monoclonal Antibody - Product Information

Application	WB, IHC, IF, ICC, FC
Primary Accession	<a href="#">Q92466</a>
Host	Rabbit
Isotype	IgG
Reactivity	Human
Clonality	Monoclonal
Format	Liquid

#### Description

Anti-DDB2 Rabbit Monoclonal Antibody . Tested in WB, IHC, ICC/IF, Flow Cytometry applications.  
This antibody reacts with Human.

#### Anti-DDB2 Rabbit Monoclonal Antibody - Additional Information

Gene ID 1643

#### Other Names

DNA damage-binding protein 2, DDB p48 subunit, DDBb, Damage-specific DNA-binding protein 2, UV-damaged DNA-binding protein 2, UV-DDB 2, DDB2

#### Calculated MW

45 kDa KDa

#### Application Details

WB 1:500-1:2000<br>IHC 1:50-1:200<br>ICC/IF 1:50-1:200<br>FC 1:20

#### Contents

Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.

#### Immunogen

A synthesized peptide derived from human DDB2

#### Purification

Affinity-chromatography

Storage

**Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.**

#### Anti-DDB2 Rabbit Monoclonal Antibody - Protein Information

Name DDB2

## Function

Protein, which is both involved in DNA repair and protein ubiquitination, as part of the UV-DDB complex and DCX (DDB1-CUL4-X-box) complexes, respectively (PubMed:<a href="http://www.uniprot.org/citations/10882109" target="\_blank">10882109</a>, PubMed:<a href="http://www.uniprot.org/citations/11278856" target="\_blank">11278856</a>, PubMed:<a href="http://www.uniprot.org/citations/11705987" target="\_blank">11705987</a>, PubMed:<a href="http://www.uniprot.org/citations/12732143" target="\_blank">12732143</a>, PubMed:<a href="http://www.uniprot.org/citations/15882621" target="\_blank">15882621</a>, PubMed:<a href="http://www.uniprot.org/citations/16473935" target="\_blank">16473935</a>, PubMed:<a href="http://www.uniprot.org/citations/18593899" target="\_blank">18593899</a>, PubMed:<a href="http://www.uniprot.org/citations/32789493" target="\_blank">32789493</a>, PubMed:<a href="http://www.uniprot.org/citations/9892649" target="\_blank">9892649</a>). Core component of the UV-DDB complex (UV-damaged DNA-binding protein complex), a complex that recognizes UV-induced DNA damage and recruit proteins of the nucleotide excision repair pathway (the NER pathway) to initiate DNA repair (PubMed:<a href="http://www.uniprot.org/citations/10882109" target="\_blank">10882109</a>, PubMed:<a href="http://www.uniprot.org/citations/11278856" target="\_blank">11278856</a>, PubMed:<a href="http://www.uniprot.org/citations/11705987" target="\_blank">11705987</a>, PubMed:<a href="http://www.uniprot.org/citations/12944386" target="\_blank">12944386</a>, PubMed:<a href="http://www.uniprot.org/citations/14751237" target="\_blank">14751237</a>, PubMed:<a href="http://www.uniprot.org/citations/16260596" target="\_blank">16260596</a>, PubMed:<a href="http://www.uniprot.org/citations/32789493" target="\_blank">32789493</a>). The UV-DDB complex preferentially binds to cyclobutane pyrimidine dimers (CPD), 6-4 photoproducts (6-4 PP), apurinic sites and short mismatches (PubMed:<a href="http://www.uniprot.org/citations/10882109" target="\_blank">10882109</a>, PubMed:<a href="http://www.uniprot.org/citations/11278856" target="\_blank">11278856</a>, PubMed:<a href="http://www.uniprot.org/citations/11705987" target="\_blank">11705987</a>, PubMed:<a href="http://www.uniprot.org/citations/12944386" target="\_blank">12944386</a>, PubMed:<a href="http://www.uniprot.org/citations/16260596" target="\_blank">16260596</a>). Also functions as the substrate recognition module for the DCX (DDB2-CUL4-X-box) E3 ubiquitin-protein ligase complex DDB2-CUL4-ROC1 (also known as CUL4-DDB-ROC1 and CUL4- DDB-RBX1) (PubMed:<a href="http://www.uniprot.org/citations/12732143" target="\_blank">12732143</a>, PubMed:<a href="http://www.uniprot.org/citations/15882621" target="\_blank">15882621</a>, PubMed:<a href="http://www.uniprot.org/citations/16473935" target="\_blank">16473935</a>, PubMed:<a href="http://www.uniprot.org/citations/18593899" target="\_blank">18593899</a>, PubMed:<a href="http://www.uniprot.org/citations/26572825" target="\_blank">26572825</a>). The DDB2-CUL4-ROC1 complex may ubiquitinate histone H2A, histone H3 and histone H4 at sites of UV- induced DNA damage (PubMed:<a href="http://www.uniprot.org/citations/16473935" target="\_blank">16473935</a>, PubMed:<a href="http://www.uniprot.org/citations/16678110" target="\_blank">16678110</a>). The ubiquitination of histones may facilitate their removal from the nucleosome and promote subsequent DNA repair (PubMed:<a href="http://www.uniprot.org/citations/16473935" target="\_blank">16473935</a>, PubMed:<a href="http://www.uniprot.org/citations/16678110" target="\_blank">16678110</a>). The DDB2-CUL4-ROC1 complex also ubiquitinates XPC, which may enhance DNA-binding by XPC and promote NER (PubMed:<a href="http://www.uniprot.org/citations/15882621" target="\_blank">15882621</a>). The DDB2-CUL4-ROC1 complex also ubiquitinates KAT7/HBO1 in response to DNA damage, leading to its degradation: recognizes KAT7/HBO1 following phosphorylation by ATR (PubMed:<a href="http://www.uniprot.org/citations/26572825" target="\_blank">26572825</a>).

## Cellular Location

Nucleus. Chromosome. Note=Accumulates at sites of DNA damage following UV irradiation.

## Tissue Location

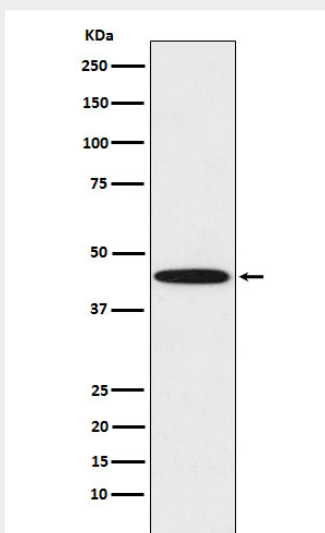
Ubiquitously expressed; with highest levels in corneal endothelium and lowest levels in brain. Isoform D1 is highly expressed in brain and heart. Isoform D2, isoform D3 and isoform D4 are weakly expressed.

## Anti-DDB2 Rabbit Monoclonal Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

## Anti-DDB2 Rabbit Monoclonal Antibody - Images



Western blot analysis of DDB2 expression in HeLa cell lysate.