

## LF-MA40319 anti-DDB1

**Product Name**

anti-DDB1

**Pack Size**

50 ug

**Description**

Mouse monoclonal to DDB1

**Immunogen**

Synthetic peptide (Synthetic peptide conjugated to protein carrier. The mice were immunized with a combination of N & C peptide. The Swiss Prot ID is Q16531. The exact region recognized by this product has not yet been determined)

**Clonality**

Monoclonal Antibody

**Host**

Mouse

**Clone#**

1322.0

**Isotype**

IgG

**Cross Reactivity**

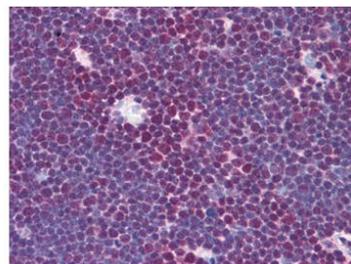
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**Application**

E  
WB  
IHC-P (Min: 5 ug/ml)

**Research Area**
[Cell Biology](#)
**Function**

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

**Image**


**IMMUNOHISTOCHEMICAL ANALYSIS of thymus  
(Formalin-Fixed Paraffin-Embedded)**

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.

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**Cellular Location**

Cytoplasm Nucleus

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**Database Link**

SwissProt : [Q16531](#)

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**Composition**

PBS.

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**Storage**

Long term: -70°C; Short term: -70°C

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