

LF-PA40317 anti-DDB1

Product Name

anti-DDB1

Pack Size

50 ug

Description

Rabbit polyclonal to DDB1

Immunogen

Synthetic peptide (Synthetic peptide conjugated to protein carrier)

Clonality

Polyclonal Antibody

Host

Rabbit

Isotype

IgG

Cross Reactivity

Hu, Ms, Rt

Application

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

Concentration

1 mg/ml

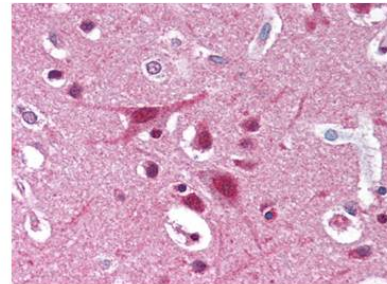
Research Area

[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 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.

Image



IMMUNOHISTOCHEMICAL ANALYSIS of brain, cortex (Formalin-Fixed Paraffin-Embedded)

Cellular Location

Cytoplasm Nucleus

Database Link

SwissProt : [Q16531](#)

Composition

PBS

Storage

Aliquot and store at -70°C. Avoid cycles of freezing and thawing
