

Product datasheet for TP516290

OriGene Technologies, Inc.

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Dtl (NM_029766) Mouse Recombinant Protein

Product data:

Product Type: Recombinant Proteins

Description: Purified recombinant protein of Mouse denticleless E3 ubiquitin protein ligase (Dtl), with C-

terminal MYC/DDK tag, expressed in HEK293T cells, 20ug

Species: Mouse

Expression Host: HEK293T

Expression cDNA Clone or AA >MR216290 representing NM 029766

Red=Cloning site Green=Tags(s)

Sequence:

MLFNSVLRQPQLGVLRNGWSSHYPLQSLLSGYQCNCNDEHTSYGETGVPVPPFGCTFCTAPSMEHILAVA NEEGFVRLYNTESQTSKKTCFKEWMAHWNAVFDLAWVPGELKLVTAAGDQTAKFWDVRAGELMGTCKGHQ CSLKSVAFPKFQKAVFSTGGRDGNIMIWDTRCNKKDGFYRQVNQISGAHNTADKQTPSKPKKKQNSKGLA PAVDSQQSVTVVLFQDENTLVSAGAVDGIIKVWDLRKNYTAYRQEPIASKSFLYPGTSTRKLGYSSLVLD STGSTLFANCTDDNIYMFNMTGLKTSPVAVFNGHQNSTFYVKSSLSPDDQFLISGSSDEAAYIWKVSMPW HPPTVLLGHSQEVTSVCWCPSDFTKIATCSDDNTLKIWRLNRGLEEKPGDKHSIVGWTSQKKKEVKACPV TVPSSQSTPAKAPRAKSSPSISSPSSAACTPSCAGDLPLPSSTPTFSVKTTPATTRSSVSRRGSISSVSP KPLSSFKMSLRNWVTRTPSSSPPVTPPASETKISSPRKALIPVSQKSSQADACSESRNRVKRRLDSSCLE SVKQKCVKSCNCVTELDGQAESLRLDLCCLSGTQEVLSQDSEGPTKSSKTEGAGTSISEPPSPVSPYASE GCGPLPLPLRPCGEGSEMVGKENSSPENKNWLLAIAAKRKAENSSPRSPSSQTPSSRRQSGKTSPGPVTI

TPSSMRKICTYFRRKTQDDFCSPEHSTEL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Tag: C-MYC/DDK
Predicted MW: 79.6 kDa

Concentration: >0.05 μg/μL as determined by microplate BCA method

Purity: > 80% as determined by SDS-PAGE and Coomassie blue staining

Buffer: 25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol

Note: For testing in cell culture applications, please filter before use. Note that you may experience

some loss of protein during the filtration process.

Storage: Store at -80°C after receiving vials.





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Stability: Stable for 12 months from the date of receipt of the product under proper storage and handling

conditions. Avoid repeated freeze-thaw cycles.

RefSeq: NP 084042

 Locus ID:
 76843

 UniProt ID:
 Q3TLR7

 RefSeq Size:
 4202

 Cytogenetics:
 1 H6

 RefSeq ORF:
 2187

Synonyms: 2810047L02Rik; 5730564G15Rik; L2dtl; Ramp

Summary: Substrate-specific adapter of a DCX (DDB1-CUL4-X-box) E3 ubiquitin-protein ligase complex

DCX(DTL) complex, also named CRL4(CDT2) complex, mediates the polyubiquitination and subsequent degradation of CDT1, CDKN1A/p21(CIP1), FBH1, KMT5A and SDE2. CDT1 degradation in response to DNA damage is necessary to ensure proper cell cycle regulation of DNA replication. CDKN1A/p21(CIP1) degradation during S phase or following UV irradiation is essential to control replication licensing. KMT5A degradation is also important for a proper regulation of mechanisms such as TGF-beta signaling, cell cycle progression, DNA repair and cell migration. Most substrates require their interaction with PCNA for their polyubiquitination: substrates interact with PCNA via their PIP-box, and those containing the 'K+4' motif in the PIP box, recruit the DCX(DTL) complex, leading to their degradation. In undamaged proliferating cells, the DCX(DTL) complex also promotes the 'Lys-164' monoubiquitination of PCNA, thereby being involved in PCNA-dependent translesion DNA synthesis. The DDB1-CUL4A-DTL E3 ligase complex regulates the circadian clock function by mediating the ubiquitination and degradation of CRY1

required for cell cycle control, DNA damage response and translesion DNA synthesis. The

(By similarity).[UniProtKB/Swiss-Prot Function]