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Product datasheet for MC224421

Dcaf1 (NM_001015507) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Dcaf1 (NM_001015507) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Dcaf1
Synonyms:	AI447437; B930007L02Rik; mKIAA0800; Vprbp
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin

Fully Sequenced ORF:

>MC224421 representing NM_001015507
Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGACTACAGTAGTGGTACATGTGGACTCCAAAGCTGAGCTCACTACCCTGCTGGAGCAGTGGGAAAAGG
ACCATGGCAGTGGCCAGGATATGGTACCAATCCTTACCAGAATGTCTGAATTAATTGAAAAAGAAACTGA
AGAATATCGTAAAGGAGATCCAGATCCATTTGATGATCGACATCCTGGTCGAGCTGATCCAGAGTGTATG
CTGGGCCATTTGCTGAGAATACTCTTCAAGAATGATGATTTCATGAATGCGCTGGTAAATGCATATGTGA
TGACAAGTAGAGAGCCCCCTTTAAATACTGCAGCTTGCAGACTGCTGCTGGACATCATGCCGGGCCTAGA
AACCGCAGTTGTCTTTCAAGAAAAGGAAGGAATTGTTGAAAATCTTTTCAAATGGGCCCGAGAGGCTGAT
CAGCCACTTAGGACATATTCTACTGGACTGCTGGGAGGTGCTATGGAAAATCAAGATATTGCTGCCAACT
ACAGAGATGAAAATTCACAGTTGGTGGCAATAGTGCTTAGAAGACTGAGGGAGCTCCAGCTTCAAGAAGT
GGCTTTGCGGCAGGACAGTAAGCGTCCTAGTCCACGGAAGCTCTCTTCGGAACCCCTTTTGCCTCTGGAT
GAGGAAGCTGTGGATATGGACTATGGTGACATGGCAGTGGATGTTGTGGATGGAGAACAAGAATCTTCTA
GAGATATGGAGATCTCCTTTCGTCTTGATTCAAGTCACAAGACCAGTAGTAGAGTGAACTCAGCAACTAA
ACCTGAGGAAGGAGGATTAAAGAAAAACAAGTCAGCAAAGCATGGTGACAGAGAGAACTTTAGGAAGGCC
AAGCAGAAGTTGGGCTTCTCATCTTCTGACCCAGATCGTGTGTTTGTTGAGCTGTCTAATAGCAGCTGGT
CAGAAATGTCCCCCTGGGTGATCGGCACCAATTACACTCTCTATCCTATGACTCCTGCTATTGAGCAGAG
ACTTATTCTTCAGTATTTGACCCCTTTAGGAGAGTATCAGGAGTTACTTCCCATATTCATGCAACTTGGA
TCAAGAGAATTGATGATGTTTTATATTGATCTGAAACAGACGAATGATGTCCTGCTTACTTTTGAGGCAC
TCAAGCACCTAGCATCTCTCCTGCTTCATAACAAATTTGCCACAGAATTTGTTGCACATGGTGGAGTACA
GAAATTACTGGAAATTCCTCGTCCTTCTATGGCTGCAACTGGTGTGTCCATGTGCTTGTATTACCTGTCC
TACAATCAGGATGCTATGGAAAGAGTTTGCATGCATCCTCACAATGTTCTATCTGATGTGGTGAACTATA
CCCTGTGGTTAATGGAATGTTCTCATGCTTCAGGATGTTGCCATGCTACTATGTTTTTCTCAATTTGTTT
CTCATTCCGGGCTGTTTTGGAGCTCTTTGACCGTTATGATGGTCTTCGTCGTCTGGTGAACTTGATCAGT
ACTTTGGAGATTTTAAATTTGGAAGACCAGGGTGCACTTTTGAGTGATGATGAAATATTTGCTAGTCGCC

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AAACAGGAAAACATACCTGCATGGCTCTGCGCAAGTATTTTGAGGCTCATCTGGCCATTAAATTGGAACA
AGTCAAGCAGTCACTTCAGAGGACTGAGGGTGGTATTCTTGTTCACCCCCAGCCTCCATACAAGGCATGC
TCATATACTCATGAGCAGATTGTAGAAATGATGGAATTTTTGATAGAGTATGGCCCAGCTCAGCTATATT
GGGAACCTGCTGAAGTCTTCCTCAAGCTTTCCTGTGTGCAGCTTTTACTACAGCTTATTTCCATCGCCTG
CAATTGGAAGACCTATTATGCAAGGAATGATACTGTGCGTTTTGCTTTGGATGTCCTTGCTATTCTCACT
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GAAGTCAGCACTTCAAATTATCATCAATTGTGTATGTGGTCCAGATAACCGAATATCCAGTATTGGCAAA
TTTATTTCTGGAACTCCTCGGAGAAAGCTGTCTCAGACTCCCAAGAGTAGTGAGCATACTCTGGCCAAGA
TGTGGAATGTGGTCCAGTCCAACAATGGCATCAAGGTGCTTCTGTCCCTGTTGTCCATCAAGATGCCCAT
TACAGACGCAGACCAGATCCGGGCCCTGGCCTGCAAAGCCCTTGTAGGCCTGTCTCGAAGTAGCACTGTT
CGACAGATCATCAGTAAACTTCCCCTTTTTAGTAGCTGCCAGATTCAACAGCTGATGAAAGAGCCTGTGC
TGCAGGATAAGCGTAGTGACCATGTCAAGTTCTGCAAATACGCTGCTGAGCTCATTGAGCGTGTATCAGG
AAAGCCTCTTCTCATTGGCACTGATGTGTCTCTCGCACGACTGCAGAAAGCAGATGTTGTTGCTCAGTCG
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CCCAGTGACTGCTGCTGCTTCTCCTGTCTCTCTTCCCCGGACCCCTCGGATTGCCAACGGCATTGCAAGT
CGACTGGGCAGCCATGCTACTGTGGGTGCTTCTGCCCCTTCTGCTCCCCCTGCCCATCCTCCACCACGGC
CCCCCCAGGGTTCATTGCCTTTGCCTGGCCCATCATATGCAGGCAATTCCCCTTTGATTGGTAGGATCAG
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GGTGCATACAGCCAGAGCCCTGCCATAAAAAAACAATTGGATAGACATCTTCCTTCCCCACCTACGCTGG
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TCAAGGCTAAACCGCAGGGCATCATTTCCAAAATATGGAGGGGTAGATGGCGGATGCTTTGATAGGCACC
TTATCTTTAGCAGATTTCGTCCGATTTCAGTATTCCGGGAAGCTAATGAAGATGAAAGTGGCTTCACCTG
TTGTGCATTCTCAGCCCGGGAGCGGTTCCTGATGCTTGGCACTTGTACAGGGCAGCTGAAGCTCTACAAT
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GGGATGGGTCCTTACTTCTGACATCTGCCACTTGGAGCCAGCCTTTGTCTGCACTTTGGGGAATGAAATC
AGTATTTGATATGAAGCATTCCTTCACAGAAGATCACTATGTTGAGTTCAGTAAGCACTCTCAGGATCGG
GTCATAGGCACAAAAGGAGACATTGCCCATATTTATGATATTCAGACTGGCAACAAGCTGTTGACTCTGT
TTAACCCAGATCTTGCCAACAACTACAAGAGGAACTGTGCCACCTTTAATCCTACAGATGATCTTGTCTT
AAATGATGGCGTCCTCTGGGATGTCCGCTCTGCACAGGCCATCCACAAGTTTGACAAGTTCAACATGAAT
ATCAGTGGTGTTTTCCATCCAAATGGGCTGGAAGTCATCATCAATACAGAGATTTGGGACCTTCGGACTT
TCCATCTTTTACACACTGTTCCTGCTCTGGATCAATGCCGTGTTGTTTTTAACCACACTGGGACAGTGAT
GTATGGAGCAATGTTGCAGGCAGATGATGAAGATGACTTACTGGAAGAGAGGATGAAAAGCCCTTTTGGG
TCATCCTTTCGAACATTCAACGCAACTGATTATAAACCTATAGCAACTATTGATGTGAAACGAAACATCT
TTGACCTGTGCACAGACACCAAAGACTGTTATCTTGCTGTCATTGAGAATCAAGGCAGCATGGATGCACT
GAATATGGACACAGTGTGCAGGCTCTATGAAGTGGGCAGGCAGCGTCTGGCAGAGGATGAGGATGAAGAG
GAGGACCAGCAGACAGCTCGGACAACTCTGATTTGGAAGATGACATCATCTTATCTCTGA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites: SgfI-MluI

ACCN: NM_001015507

Insert Size: 4260 bp

OTI Disclaimer: Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).

Components:	The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).
Reconstitution Method:	1. Centrifuge at 5,000xg for 5min. 2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA. 3. Close the tube and incubate for 10 minutes at room temperature. 4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom. 5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.
RefSeq:	NM_001015507.2, NP_001015507.1
RefSeq Size:	5392 bp
RefSeq ORF:	4260 bp
Locus ID:	321006
UniProt ID:	Q80TR8
Cytogenetics:	9 F1
Gene Summary:	Acts both as a substrate recognition component of E3 ubiquitin-protein ligase complexes and as an atypical serine/threonine-protein kinase, playing key roles in various processes such as cell cycle, telomerase regulation and histone modification. Probable substrate-specific adapter of a DCX (DDB1-CUL4-X-box) E3 ubiquitin-protein ligase complex, named CUL4A-RBX1-DDB1-DCAF1/VPRBP complex, which mediates ubiquitination and proteasome-dependent degradation of proteins such as NF2. Involved in the turnover of methylated proteins: recognizes and binds methylated proteins via its chromo domain, leading to ubiquitination of target proteins by the RBX1-DDB1-DCAF1/VPRBP complex. The CUL4A-RBX1-DDB1-DCAF1/VPRBP complex is also involved in B-cell development: DCAF1 is recruited by RAG1 to ubiquitinate proteins, leading to limit error-prone repair during V(D)J recombination. Also part of the EDVP complex, an E3 ligase complex that mediates ubiquitination of proteins such as TERT, leading to TERT degradation and telomerase inhibition. Also acts as an atypical serine/threonine-protein kinase that specifically mediates phosphorylation of 'Thr-120' of histone H2A (H2AT120ph) in a nucleosomal context, thereby repressing transcription. H2AT120ph is present in the regulatory region of many tumor suppresor genes, down-regulates their transcription and is present at high level in a number of tumors. Involved in JNK-mediated apoptosis during cell competition process via its interaction with LLGL1 and LLGL2.[UniProtKB/Swiss-Prot Function]