

MRCPPU REAGENTS and SERVICES

Standard Operating Procedure

Preparation of DCUN1D5 [1 – 124]

Enzyme description:- DCUN1D5 [1 - 124]

Clone number:- DU 22413

Source:- Recombinant

Expression system:- *E.coli*

Tag:- N-terminal MBP

Purification method:- Amylose resin

Calculated molecular mass:-

Monoisotopic 60, 572.69 daltons

Average Mass 60, 611.17 daltons

[cysteines reduced, methionines have not been oxidized]

Theoretical pI:- 5.32

Purity:- >80 %

Enzyme storage buffer:-

50 mM Tris-HCl pH 7.5, 0.1 mM EGTA, 150 mM NaCl, 0.1 % 2-mercaptoethanol,
270 mM Sucrose

Storage temperature:- -70 °C

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Clone Data Sheet

DCUN1D5 [1 - 124]

<u>Protein</u>	DCUN1D5 [1 – 124]
<u>Clone number</u>	DU 22413
<u>Species</u>	Human
<u>Accession number</u>	Q9BTE7
<u>Tags</u>	N-terminal MBP
<u>Bacterially expressed protein</u>	<p>MKIKTGARILALSALTTMMFSASALAKIEEGKLVWINGDKGYNGLAEV GKKFEKDTGIKVTVEHPDKLEEKFPQVAATGDGPDIIFWAHDRFGGYAQ SGLLAEITPDKAFQDKLYPFTWDVRYNGKLIAYPIAVEALSLIYNKDL LPNPPKTWEEIPALDKELKAKGKSALMFNLQEPYFTWPLIAADGGYAFK YENGKYDIKDVGVNAGAKAGLTFVLVDLIKKNHMNADTDYSIAEAAFNK GETAMTINGPWAWSNIDTSKVNYGVTVLPTFKGQPSKPFVGVLSAGINA ASPKNELAKEFLENYLLTDEGLEAVNKDKPLGAVALKS YEEELAKDPRI AATMENAQKGEIMPNI PQMSAFWYAVRTAVINAASGRQTVDEALKDAQT NSSNNNNNNNNNNNLGIEGRISELALEVLFGQGPWGSMPVKKKRKSPGVA AAVAEDGGLKCKISSYCRSQPPARLISGEEHFSSKKCLAWFYEYAGPD EVVGPEGMEKFCEDIGVEPENIIMLVLAWKLEAESMGFFTKEEWLKGMT SLQCDCTEKLQNK</p>
<u>Native sequence</u>	<p>Amino acids M1 – K124 (end residue S237) of human DCUN1D5. Residue M429 of the fusion protein is equivalent to M1 of the native enzyme. The MBP tag is located at residues 1 – 406.</p>
<u>Protease cleavage</u>	Factor X (<u>IEGR</u>) residues 409 - 412
<u>Cloning sites</u>	<i>Bam</i> H1 and <i>Not</i> 1 sites of pMal

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Nucleotide Sequence

ATGAAAATAAAAACAGGTGCACGCATCCTCGCATTATCCGCATTAACGA
CGATGATGTTTTCCGCTCGGCTCTCGCCAAAATCGAAGAAGGTAAACT
GGTAATCTGGATTAACGGCGATAAAGGCTATAACGGTCTCGCTGAAGTC
GGTAAGAAATTCGAGAAAGATACCGGAATTAAGTCACCGTTGAGCATC
CGGATAAACTGGAAGAGAAATTCCCACAGGTTGCGGCAACTGGCGATGG
CCCTGACATTATCTTCTGGGCACACGACCGCTTTGGTGGCTACGCTCAA
TCTGGCCTGTTGGCTGAAATCACCCCGGACAAAGCGTTCCAGGACAAGC
TGTATCCGTTTACCTGGGATGCCGTACGTTACAACGGCAAGCTGATTGC
TTACCCGATCGCTGTTGAAGCGTTATCGCTGATTTATAACAAAGATCTG
CTGCCGAACCCGCCAAAACCTGGGAAGAGATCCCGGCGCTGGATAAAG
AACTGAAAGCGAAAGGTAAGAGCGCGCTGATGTTCAACCTGCAAGAACC
GTACTTCACCTGGCCGCTGATTGCTGCTGACGGGGTTATGCGTTCAAG
TATGAAAACGGCAAGTACGACATTAAGACGTGGGCGTGGATAACGCTG
GCGCGAAAGCGGGTCTGACCTTCCTGGTTGACCTGATTAAAAACAAACA
CATGAATGCAGACACCGATTACTCCATCGCAGAAGCTGCCTTTAATAAAA
GGCGAAACAGCGATGACCATCAACGGCCCGTGGGCATGGTCCAACATCG
ACACCAGCAAAGTGAATTATGGTGTAAACGGTACTGCCGACCTTCAAGG
TCAACCATCCAAACCGTTCGTTGGCGTGCTGAGCGCAGGTATTAACGCC
GCCAGTCCGAACAAAGAGCTGGCAAAGAGTTCCTCGAAAACATCTGC
TGACTGATGAAGGTCTGGAAGCGGTTAATAAAGACAAACCGCTGGGTGC
CGTAGCGCTGAAGTCTTACGAGGAAGAGTTGGCGAAAGATCCACGTATT
GCCGCCACTATGGAAAACGCCAGAAAGGTGAAATCATGCCGAACATCC
CGCAGATGTCCGCTTTCTGGTATGCCGTGCGTACTGCCGTGATCAACGC
CGCCAGCGGTCGTCAGACTGTTCGATGAAGCCCTGAAAGACGCGCAGACT
AATTCGAGCTCGAACAACAACAATAACAATAACAACAACCTCGGGA
TCGAGGGAAGGATTTTCAGAATTGGCGCTGGAAGTTCTGTTCCAGGGCCC
CTGGgga tccATGCCGGTGAAGAAGAAGAGAAAATCCCCTGGGGTGGCA
GCAGCAGTAGCGGAAGACGGAGGCCTCAAAAAGTGTAATACTCCAGCT
ATTGCAGATCCCAACCCCTGCTAGACTAATAAGTGGAGAGGAACATTT
TTCAAGCAAGAAGTGCCTGGCTTGGTTTTATGAATATGCAGGTCCTGAT
GAAGTTGTAGGGCCAGAAGGAATGGAAAAATTTTGTGAAGACATTGGTG
TTGAACCTGAAAATATTATTATGTTAGTTTTAGCGTGGAATTTGGAGGC
TGAAAGCATGGGATTTTTTACCAAGGAAGAATGGTTAAAGGGAATGACT
TCATTACAGTGTGACTGCACAGAAAAGTTACAAAACAAA t aagcggccg
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