

Product datasheet for RC223365

UPB1 (NM_016327) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	UPB1 (NM_016327) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	UPB1
Synonyms:	BUP1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC223365 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCGGGCGCTGAGTGGAAAGTCGCTGGAGGAATGCTTGGAGAAGCACCTGCCGCTCCCGACTTGCAGG
AAGTGAAGCGGTTCTCTATGGCAAGGAACTCAGGAAGCTTGATCTGCCAGGGAAGCTTTCGAAGCTGC
CTCCAGAGAAGACTTTGAACTGCAGGGATATGCCTTTGAAGCAGCGGAGGAGCAGCTGAGACGACCCCGC
ATTGTGCACGTGGGGCTGGTTCAGAACAGAATCCCCCTCCCCGAAATGCCCTGTGGCAGAACAGGTCT
CTGCCCTTCATAGACGCATAAAGGCTATCGTAGAGGTGGCTGCAATGTGTGGAGTCAACATCATCTGTTT
CCAGGAAGCATGGACTATGCCCTTTCCTTCTGTACGAGAGAGAAGCTTCCTTGGACAGAATTTGCTGAG
TCAGCAGAGGATGGGCCACCACAGATTCTGTGAGAAGCTGGCGAAGAACCATGACATGGTGGTGGTGT
CTCCCATCCTGGAACGAGACAGCGAGCATGGGGATGTTTTGTGGAATACAGCCGTGGTATCTCCAATTC
CGGAGCAGTCTGGGAAAGACCAGGAAAAACCACATCCCCAGAGTGGGTGATTTCAACGAGTCAACTTAC
TACATGGAGGGAAACCTGGGCCACCCCGTGTCCAGACGCAGTTCGGAAGGATCGCGGTGAACATTTGCT
ACGGGCGGCACCACCCCTCAACTGGCTTATGTACAGCATCAACGGGGCTGAGATCATCTTCAACCCCTC
GGCCACGATAGGAGCACTCAGCGAGTCCCTGTGGCCATCGAGGCCAGAAACGCAGCCATTGCCAATCAC
TGCTTACCTGCGCCATCAATCGAGTGGCACCAGCACTTCCGAAACGAGTTTACCTCGGGAGATGGAA
AGAAAGCTCACCAGGACTTTGGCTACTTTTATGGCTCGAGCTATGTGGCAGCCCTGACAGCAGCCGGAC
TCTGGGCTGTCCGTAGCCGGGATGGACTGCTAGTTGCTAAGCTCGACCTAAACCTCTGCCAGCAGGTG
AATGATGTCTGGAACCTCAAGATGACGGGCAGGTATGAGATGTACGCACGGGAGCTCGCCGAAGCTGTCA
AGTCCAACCTACAGCCCCACCATCGTGAAGAG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC223365 protein sequence
Red=Cloning site Green=Tags(s)

MAGAEWKSLEECLEKHLPLPDLQEVKRVLYGKELRKLDLPREAFEASREDFELQGYAFEAAEEQLRRPR
 IVHVGLVQNRIPLPANAPVAEQVSALHRRRIKAIVEVAAACGVNIICFQEAWTMPFAFCTREKLPWTEFAE
 SAEDGPTTRFCQKLAKNHDMVVVSPILERDSEHGDVWNTAVVISNSGAVLGKTRKNHIPRVGDFNESTY
 YMEGNLGHVPVFQTQFGRIAVNICYGRHHPLNWL MYSINGAEIIFNPSATIGALSESLWPIEARNAAIANH
 CFTCAINRVGTEHFPNEFTSGDGKKAHQDFGYFYGSSSYVAAPDSSRTPGLSRSRDGLLVAKL DLNL CQQV
 NDVWNFKMTGRYEMYARELAEAVKSNYSPTIVKE

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6558_a03.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



* The last codon before the Stop codon of the ORF

ACCN: NM_016327

ORF Size: 1152 bp

OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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_016327.3](#)

RefSeq Size: 2167 bp

RefSeq ORF: 1155 bp

Locus ID: 51733

UniProt ID: [Q9UBR1](#)

Cytogenetics: 22q11.23

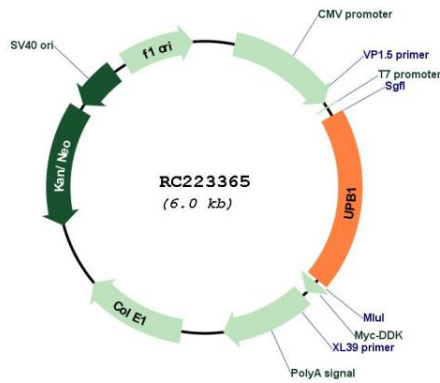
Domains: CN_hydrolase

Protein Pathways: beta-Alanine metabolism, Drug metabolism - other enzymes, Metabolic pathways, Pantothenate and CoA biosynthesis, Pyrimidine metabolism

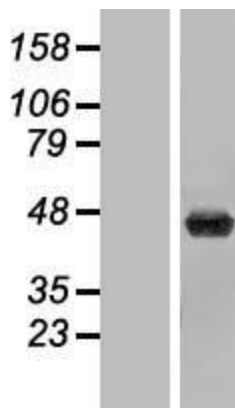
MW: 43.2 kDa

Gene Summary: This gene encodes a protein that belongs to the CN hydrolase family. Beta-ureidopropionase catalyzes the last step in the pyrimidine degradation pathway. The pyrimidine bases uracil and thymine are degraded via the consecutive action of dihydropyrimidine dehydrogenase (DHPDH), dihydropyrimidinase (DHP) and beta-ureidopropionase (UP) to beta-alanine and beta-aminoisobutyric acid, respectively. UP deficiencies are associated with N-carbamyl-beta-amino aciduria and may lead to abnormalities in neurological activity. [provided by RefSeq, Jul 2008]

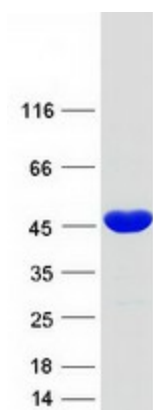
Product images:



Circular map for RC223365



Western blot validation of overexpression lysate (Cat# [LY414060]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC223365 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified UPB1 protein (Cat# [TP323365]). The protein was produced from HEK293T cells transfected with UPB1 cDNA clone (Cat# RC223365) using MegaTran 2.0 (Cat# [TT210002]).