

## Product datasheet for SC114316

### UPB1 (NM\_016327) Human Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	UPB1 (NM_016327) Human Untagged Clone
Tag:	Tag Free
Symbol:	UPB1
Synonyms:	BUP1
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL4</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>OriGene ORF within SC114316 sequence for NM_016327 edited (data generated by NextGen Sequencing)

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ATGGCGGGCGCTGAGTGGAAAGTCGCTGGAGGAATGCTTGGAGAAGCACCTGCCGCTCCCC
GACTTGCAGGAAGTGAAGCGGTTCTCTATGGCAAGGAAGCTCAGGAAGCTTGATCTGCC
AGGGAAGCTTTCGAAGCTGCCTCCAGAGAAGACTTTGAACTGCAGGGATATGCCTTTGAA
GCAGCGGAGGAGCAGCTGAGACGACCCCGCATTGTGCACGTGGGCTGGTTCAGAACAGA
ATCCCCCTCCCCGCAAATGCCCTGTGGCAGAACAGGTCTCTGCCCTTCATAGACGCATA
AAGGCTATCGTAGAGGTGGCTGCAATGTGTGGAGTCAACATCATCTGTTTCCAGGAAGCA
TGGACTATGCCCTTTCCTTCTGTACGAGAGAGAAGCTTCCCTGGACAGAATTTGCTGAG
TCAGCAGAGGATGGGCCACCACCAGATTCTGTCAGAAGCTGGCGAAGAACCATGACATG
GTGGTGGTGTCTCCCATCTGGAACGAGACAGCGAGCATGGGGATGTTTTGTGGAATACA
GCCGTGGTGATCTCCAATTCGGGAGCAGTCTGGGAAAGACCAGGAAAAACCACATCCCC
AGAGTGGGTGATTTCAACGAGTCAACTTACTACATGGAGGGAAACCTGGGCCACCCCGTG
TTCCAGACGCAGTTCGGAAGGATCGCGGTGAACATTTGCTACGGGCGGCACCACCCCTC
AACTGGCTTATGTACAGCATCAACGGGGCTGAGATCATCTTCAACCCCTCGGCCACGATA
GGAGCACTCAGCGAGTCCCTGTGGCCATCGAGGCCAGAAACGCAGCCATTGCCAATCAC
TGCTTACCTGCGCCATCAATCGAGTGGCACCAGCACTTCCCGAACGAGTTTACCTCG
GGAGATGGAAAGAAAGCTCACCAGGACTTTGGCTACTTTTATGGCTCGAGCTATGTGGCA
GCCCTGACAGCAGCCGGACTCCTGGGCTGTCCCGTAGCCGGGATGGACTGCTAGTTGCT
AAGCTCGACCTAAACCTCTGCCAGCAGGTGAATGATGTCTGGAACCTTCAAGATGACGGGC
AGGTATGAGATGTACGCACGGGAGCTCGCCGAAGCTGTCAAGTCCAACCTACAGCCCCACC
ATCGTGAAGAGTAG

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Clone variation with respect to NM\_016327.2



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<b>5' Read Nucleotide Sequence:</b>	<p>&gt;OriGene 5' read for NM_016327 unedited            NNNNNGGGGGNNNNNNNNCCCCNNNNNNNNNGGGTCCAGAAATTGTNATACGACTCAC            TATAGGCGGCCGGAATTCGCACCAGCGGGCAAAGGCAGGCAGTTCTGTGCGCGACACAA            GCACTGGCGGACCGTGGCCATGGCGGGCGCTGAGTGGAAGTCGCTGGAGGAATGCTTGA            GAAGCACCTGCCGCTCCCGACTTGCAGGAAGTGAAGCGCTTCTCTATGGCAAGGAAC            CAGGAAGCTTGATCTGCCAGGGAAGCTTTCGAAGCTGCCTCCAGAGAAGACTTTGAAC            GCAGGGATATGCCTTTGAAGCAGCGGAGGAGCAGCTGAGACGACCCCGCATTGTGCACGT            GGGCTGGTTTCAAAACAGAATCCCCCTCCCGCAAATGCCCTGTGGCAGAACAGGTCTC            TGCCCTTCATAGACGCATAAAGGCTATCGTAGAGGTGGCTGCAATGTGTGGAGTCAACAT            CATCTGTTTCCAGGAAGCATGGACTATGCCCTTGGCTTCTGTACGAGAGAGAAGCTTCC            TTGGACAGAAATTTGCTGAGTCAGCAGAGGATGGGCCACCACCAGATTCTGTCAGAAGCT            GGCGAAGAACCATGACATGGTGGTGGTGTCTCCCATCTGNAACGAGACAGCGAGCATGG            NGATGTTNTGTGGAATACAGCCGTGGTGTCTCCAATTCGGAGCAGTCTGNGAAAGAC            CAGAANAACCACANTCCAGAGTGGGTGATTTCAACGAGTCACTTACTACATGGAGGG            GAAACCTGNGCCACCCCGTGTCCANAACGCATTGNAAGGAATCGCGTAAACATTTG            CTACGGGCGGGCACACCCCNCTACTGGCTTATGTACAGCATCAAACGGGGCTGAGATCA            TTTTCAACCTTCGNCCACCATAGGAGCACTCAGCCGAGTCCCTTGTGGGCCAT</p>
<b>3' Read Nucleotide Sequence:</b>	<p>&gt;OriGene 3' read for NM_016327 unedited            NNTTTTTGACTCATGCCCGCGNCCGCATNCTANGATCGAGTTTTTTTTTTTTTTTTTT            TTTTTTAGGGGATATATTGAGATTTATTGCAAGGAATTGACTTCAGTGATTGTAGGAGC            TGGCTAGTCATGTCTAAACTCTGTGAGGCAGGCTATCAAAGGGCAGACTGTCAGGAAC            CTGCCAAGCACTGGGCTGCTGTCTCAGGCAGAAATTTCTCCTCAGGAAACCCCTTAGC            TCTGTTCTTAGGCCCTTCTGACTAATCAGGTCAGGCTGACCCAGATTATCTGAGATAATC            TCACTTACTTAGTCAATTGGGAATGGACTTCTGTACATCTACAAAATACCTTCACAGAA            ATACCTAGATTAGTGTCTGATTGAATTACTGGTACTGTGGCCTAGCTAAGCTGACACAT            CCAAAGACCATCCGACCCACCACAGCCTTGCTGTAGGCTCAGGGTCTCTGGATCAGCCCT            CACCCTTCCCCTGGTGTACGGGATGGACAGCATCATCTGCCTAACCTCAAATCCACC            TGCACAAGCAGTACCTGGGCATTTTTTTTTTTAGTTGAGGTAAAAATTTACATAACAAACA            TTCTGAAGTATACAAATTCAGTGGCATTTAGTACATTCACCTCTACCTAGTCCCCAAACA            TTTCCAATACCCCAAGTAAGCAGCCCTTACCATTAAAGAAGTCACTCCCATGCCAC            TCTCCCCCTGCCTGGGAATNTAAAACCAACCTGGACAATGTTATTGGGGAAGAACCTGG            ACATGTTAAGCCTGCCACACTTGCTAATCCACTGGGGCAGAGGTGTCTTCTCACCCCAA            AGCAGCACTGAAGCCGGCTACTCTTTCACGATGGTGGGGCTGTANTGGNACTTGACAGNN            CTCGGAAGCTCCGTGCGTACATCTCATACCT</p>
<b>Restriction Sites:</b>	NotI-NotI
<b>ACCN:</b>	NM_016327
<b>Insert Size:</b>	2170 bp
<b>OTI Disclaimer:</b>	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).
<b>Components:</b>	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\\_016327.2](#), [NP\\_057411.1](#)

**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

**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]