

Product datasheet for SC324456

OriGene Technologies, Inc.

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Acid Phosphatase (ACP1) (NM_007099) Human Untagged Clone

Product data:

Product Type: Expression Plasmids

Product Name: Acid Phosphatase (ACP1) (NM_007099) Human Untagged Clone

Tag: Tag Free

Symbol: Acid Phosphatase

Synonyms: HAAP; LMW-PTP; LMWPTP

Mammalian Cell

Selection:

Neomycin

Vector:pCMV6-AC (PS100020)E. coli Selection:Ampicillin (100 ug/mL)

Fully Sequenced ORF: >OriGene sequence for NM_007099.2

CGGCGCCTCTGCGCGCGGAAGATGGCGGAACAGGCTACCAAGTCCGTGCTGTTTGTGTG TCTGGGTAACATTTGTCGATCACCCATTGCAGAAGCAGTTTTCAGGAAACTTGTAACCGA TCAAAACATCTCAGAGAATTGGGTCATTGACAGCGGTGCTGTTTCTGACTGGAACGTGGG CCGGTCCCCAGACCCAAGAGCTGTGAGCTGCCTAAGAAATCATGGCATTCACACAGCCCA TGAAAGCAATCTGAGAGATTTGAATAGAAAAAGTAATCAAGTTAAAACCTGCAAAGCTAA AATTGAACTACTTGGGAGCTATGATCCACAAAAACAACTTATTATTGAAGATCCCTATTA TGGGAATGACTCTGACTTTGAGACGGTGTACCAGCAGTGTGTCAGGTGCTGCAGAGCGTT CTTGGAGAAGGCCCACTGAGGCAGGTTCGTGCCCTGCTGCGGCCAGCCTGACTAGACCCC ACCCTGAGGTCCTGCATTTCTCAGTCGGTGTGTAATCACGTTCCAGGGCCCAAAGCCCAG CTCTTTGTTCAGTTGACTTACTGTTTCTTACCTTAAAAAGTAATTGTAGATGGAAATCAG TTGTGTTTGGCAGGAGAATCAATAAAAATCTTTGATTCAGACAGCTTATGGGGTATTTTA AGCATTCTTAGACTAGTTGAACATCTCACTTTGCCCCAGTTACAAAAATAGTAGAACAAG CAACATAAAACAATGAAGGAAAACCTCACTTGAAGGCCCAGGTCAACATCTAAGCCTGTT GAGACTTAGATAATCGAGTCTACCTCTTCAGTAGGTTTGTGTGGATGGCCTGGAGGGCAG GTGCCCTCTGCTCCCCAGTGCTACCTCTCTCTCTCCCTAGGGCCTTTTGTGGATTGACAGT AGTCCCCTCCGTAGGAGCTCACAGTCTAGATTAGAAGTGTTTTAATTTCTACACACCCAT AGTGCACACTTGTATATTGAAAAGATAGGGAAGAGAGAAACATTTATGGAATCAGTCGTT GGCACCTTCAATACTTCATGATTTTTGTCGAGTTTACTTCATGAGGAGGTCAGCCCATTG GCTCCCATCTGAACCACTTTGCCTCTGAAACTTAATTACATCCAGAAAGGAGGACACTTG TATGCTAGTCTATGGTCAGTTGAGGAATATGACTGTTTTTATATGCACATGTAACCCAAA TGTCCAATATAAATTGGCTTATTTTTTAAAATAATTTTAAAAGTTGGGAAAAGTGTTATT ATTTGGCATGCTTAAATATTGAATAAGTATTCTTCATCAGCATTTAATAAATGTATAGGC

Restriction Sites: Please inquire





ACCN: NM_007099

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts

of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at customer.com or by

calling 301.340.3188 option 3 for pricing and delivery.

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 TrueClone is provided through our Custom Cloning Process that includes sub-cloning

into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.

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: <u>NM 007099.2</u>, <u>NP 009030.1</u>

RefSeq Size: 1549 bp RefSeq ORF: 477 bp

Locus ID: 52

UniProt ID: P24666

Cytogenetics: 2p25.3

Domains: LMWPc

Protein Families: Druggable Genome, Phosphatase, Transmembrane

Protein Pathways: Adherens junction, Riboflavin metabolism



Gene Summary:

The product of this gene belongs to the phosphotyrosine protein phosphatase family of proteins. It functions as an acid phosphatase and a protein tyrosine phosphatase by hydrolyzing protein tyrosine phosphate to protein tyrosine and orthophosphate. This enzyme also hydrolyzes orthophosphoric monoesters to alcohol and orthophosphate. This gene is genetically polymorphic, and three common alleles segregating at the corresponding locus give rise to six phenotypes. Each allele appears to encode at least two electrophoretically different isozymes, Bf and Bs, which are produced in allele-specific ratios. Multiple alternatively spliced transcript variants encoding distinct isoforms have been identified for this gene. [provided by RefSeq, Aug 2008]

Transcript Variant: This variant (2) has multiple differences in the coding region, compared to variant 4, one of which results in a translational frameshift. The resulting protein (isoform b, also known as Bs) has a distinct C-terminus and is longer than isoform d. Sequence Note: The RefSeq transcript and protein were derived from transcript and genomic sequence to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on alignments.