

Product datasheet for **RC201078**

Acid Phosphatase (ACP1) (NM_007099) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Acid Phosphatase (ACP1) (NM_007099) Human Tagged ORF Clone
Tag: Myc-DDK
Symbol: Acid Phosphatase
Synonyms: HAAP; LMW-PTP; LMWPTP
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
ORF Nucleotide Sequence: >RC201078 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGGATCGCC**

ATGGCGGAACAGGCTACCAAGTCCGTGCTGTTTGTGTCTGGTAACATTTGTCGATCACCCATTGCAG
AAGCAGTTTTAGGAACTTGTAAACCGATCAAACATCTCAGAGAATTGGGTATTGACAGCGGTGCTGT
TTCTGACTGGAACGTGGCCGGTCCCAGACCCAAGAGCTGTGAGCTGCCTAAGAAATCATGGCATTAC
ACAGCCATAAAGCAAGACAGATTACCAAAGAAGATTTGCCACATTTGATTATATACTATGTATGGATG
AAAGCAATCTGAGAGATTGAATAGAAAAAGTAATCAAGTAAAACCTGCAAAGCTAAAATTGAACTACT
TGGGAGCTATGATCCACAAAAACAATTATTATTGAAGATCCCTATTATGGGAATGACTCTGACTTTGAG
ACGGTGTACCAGCAGTGTGTCAGGTGCTGCAGAGCGTTCTTGGAGAAGGCCAC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC201078 protein sequence
Red=Cloning site Green=Tags(s)

MAEQATKSVL FVCLGNICRSPIAEAVFRKLVTDQNI SENWVIDSGAVSDWNVGRSPDPRAVSCLRNHGIH
TAHKARQITKEDFATFDYILCMDES NLRDLNRKSNQVKTKAKIELLGSYDPQKQLI IEDPPYGNDSDFE
TVYQQCVRCCRAFLEKAH

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6144_e08.zip



[View online »](#)

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_007099

ORF Size: 474 bp

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 custsupport@origene.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 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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_007099.3](#)

RefSeq Size: 1568 bp

RefSeq ORF: 477 bp

Locus ID: 52

UniProt ID: [P24666](#)

Cytogenetics: 2p25.3

Domains: LMWPc

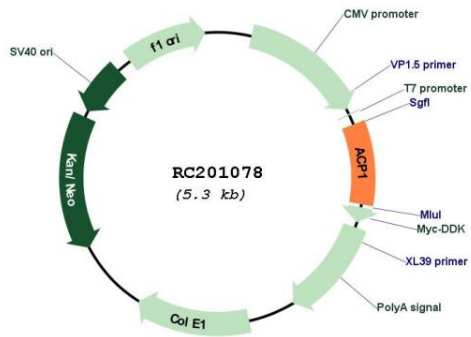
Protein Families: Druggable Genome, Phosphatase, Transmembrane

Protein Pathways: Adherens junction, Riboflavin metabolism

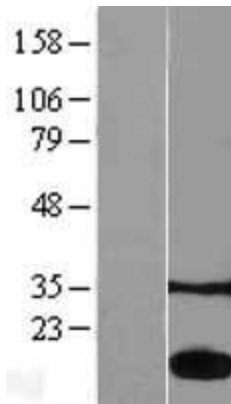
MW: 18 kDa

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]

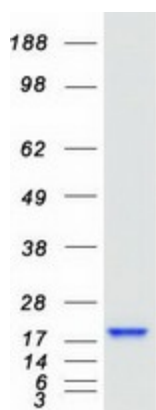
Product images:



Circular map for RC201078



Western blot validation of overexpression lysate (Cat# [LY402090]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC201078 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified ACP1 protein (Cat# [TP301078]). The protein was produced from HEK293T cells transfected with ACP1 cDNA clone (Cat# RC201078) using MegaTran 2.0 (Cat# [TT210002]).