

Product datasheet for RC212653

Acid Phosphatase (ACP1) (NM_004300) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Acid Phosphatase (ACP1) (NM_004300) 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: >RC212653 representing NM_004300
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGGCGGAACAGGCTACCAAGTCCGTGCTGTTTGTGTCTGGTAACATTTGTCGATCACCCATTGCAG
 AAGCAGTTTTAGGAACTTGTAAACCGATCAAACATCTCAGAGAATTGGAGGGTAGACAGCGCGGCAAC
 TTCGGGTATGAGATAGGGAACCCCTGACTACCGAGGGCAGAGCTGCATGAAGAGGCACGGCATTCCC
 ATGAGCCACGTTGCCCGCAGATTACCAAAGAAGATTTGCCACATTTGATTATATACTATGTATGGATG
 AAAGCAATCTGAGAGATTTGAATAGAAAAGTAATCGAGTTAAACCTGCAAAGCTAAAATTGAACTACT
 TGGGAGCTATGATCCACAAAACAATTATTATTGAAGATCCCTATTATGGGAATGACTCTGACTTTGAG
 ACGGTGTACCAGCAGTGTGTCAGGTGCTCAGAGCGTTCTTGGAGAAGGCCAC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC212653 representing NM_004300
 Red=Cloning site Green=Tags(s)
 MAEQATKSVL FVCLGNICRSPIAEAVFRKLVTDQNI SENWRVDS AATSGYEIGNPPDYRGQSCMKRHGIP
 MSHVARQITKEDFATFDYILCMDES NLRDLNRKSNRVKTKAKIELLGSYDPQKQLIIEDPYGNDSDFE
 TVYQQCVRCCRAFLEKAH

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6494_g12.zip



[View online »](#)

Restriction Sites: Sgfl-MluI

Cloning Scheme:



ACCN: NM_004300

ORF Size: 474 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.

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

RefSeq: [NM_004300.4](#)

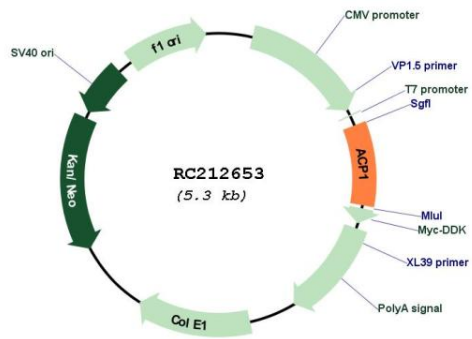
RefSeq Size: 1549 bp

RefSeq ORF: 477 bp

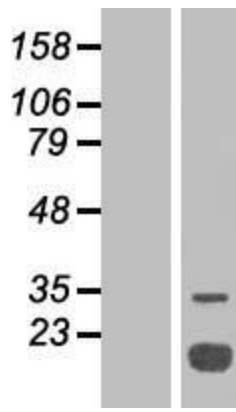
Locus ID: 52
UniProt ID: [P24666](#)
Cytogenetics: 2p25.3
Domains: LMWPc
Protein Families: Druggable Genome, Phosphatase, Transmembrane
Protein Pathways: Adherens junction, Riboflavin metabolism
MW: 17.9 kDa

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]

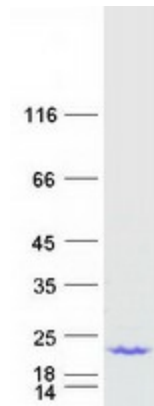
Product images:



Circular map for RC212653



Western blot validation of overexpression lysate (Cat# [LY418090]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC212653 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified ACP1 protein (Cat# [TP312653]). The protein was produced from HEK293T cells transfected with ACP1 cDNA clone (Cat# RC212653) using MegaTran 2.0 (Cat# [TT210002]).