

## Product datasheet for RC225473

### Tartrate Resistant Acid Phosphatase (ACP5) (NM\_001111036) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Tartrate Resistant Acid Phosphatase (ACP5) (NM_001111036) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Tartrate Resistant Acid Phosphatase
Synonyms:	HPAP; TRACP5a; TRACP5b; TRAP; TrATPase
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC225473 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGACATGTGGACGGCGCTGCTCATCCTGCAAGCCTTGTGCTACCCTCCCTGGCTGATGGTGCCACCC  
CTGCCCTGCGCTTTGTAGCCGTGGGTGACTGGGGAGGGGTCCCAATGCCCATTCACACGGCCCGGGA  
AATGGCCAATGCCAAGGAGATCGCTCGGACTGTGCAGATCCTGGGTGCAGACTTCATCCTGTCTTAGGG  
GACAATTTTTACTTCACTGGTGTGCAAGACATCAATGACAAGAGGTTCCAGGAGACCTTTGAGGACGTAT  
TCTCTGACCGCTCCCTTCGCAAAGTGCCCTGGTACGTGCTAGCCGAAACCATGACCACCTTGGCAATGT  
CTCTGCCAGATTGCATACTCTAAGATCTCCAAGCGCTGGAATTCGCCAGCCCTTCTACCGCCTGCAC  
TTCAAGATCCACAGACCAATGTGTCTGTGGCCATTTTTATGCTGGACACAGTGACACTATGTGGCAACT  
CAGATGACTTCCTCAGCCAGCAGCCTGAGAGGCCCCGAGACGTGAAGCTGGCCCGCACACAGCTGTCCTG  
GCTCAAGAAACAGCTGGCGGGCCAGGGAGGACTACGTGCTGGTGGCTGGCCACTACCCCGTGTGGTCC  
ATAGCCGAGCACGGGCTACCCACTGCCTGGTCAAGCAGCTACGGCCACTGCTGGCCACATACGGGGTCA  
CTGCCTACCTGTGCGGCCACGATCAAACTGCAGTACCTGCAAGATGAGAATGGCGTGGGCTACGTGCT  
GAGTGGGGCTGGGAATTCATGGACCCCTCAAAGCGGCACCAGCGCAAGGTCCCCAACGGCTATCTGGCC  
TTCCACTATGGGACTGAAGACTCACTGGGTGGCTTTGCCTATGTGGAGATCAGCTCCAAAGAGATGACTG  
TCACTTACATCGAGGCCCTCGGGCAAGTCCCTCTTAAGACCAGGCTGCCGAGGCGAGCCAGGCC

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



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**Protein Sequence:** >RC225473 protein sequence  
Red=Cloning site Green=Tags(s)

MDMWTALLILQALLLPSLADGATPALRFVAVGDWGGVNPAPFHTAREMANAKEIARTVQILGADFILSLG  
 DNFYFTGVQDINDKRFQETFEDVFSDRSLRKVPWYVLAGNHDHLGNVSAQIAYSKI SKRWNFPSPFYRLH  
 FKIPQTNVSVAI FMLDTVTL CGNSDDFLSQQPERPRDVKLARTQLSWLKKQLAAAREDYVLVAGHYPVWS  
 IAEHGPTHCLVKQLRPLLATYGVTA YL CGHDHNLQYLQDENG VGYVLSGAGNFM DP SKRHQRKVPNGYLR  
 FHYGTEDSLGGFAYVEISSKEMTVTYIEASGKSLFKTRLPRRARP

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6003\\_f01.zip](https://cdn.origene.com/chromatograms/mk6003_f01.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



\* The last codon before the Stop codon of the ORF

**ACCN:** NM\_001111036

**ORF Size:** 975 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\\_001111036.3](#)

**RefSeq Size:** 1590 bp

**RefSeq ORF:** 978 bp

**Locus ID:** 54

**UniProt ID:** [P13686](#)

**Cytogenetics:** 19p13.2

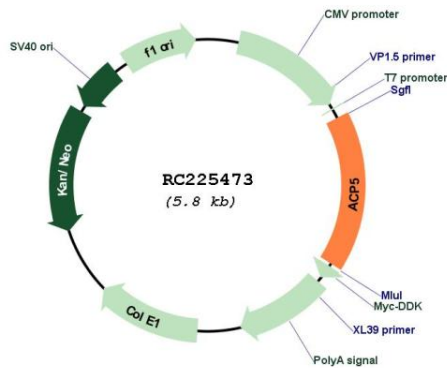
**Protein Families:** Druggable Genome

**Protein Pathways:** Lysosome, Riboflavin metabolism

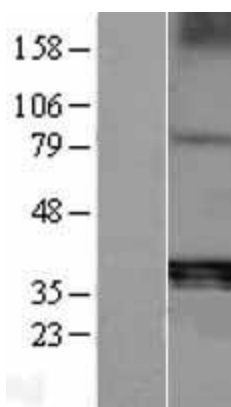
**MW:** 36.6 kDa

**Gene Summary:** This gene encodes an iron containing glycoprotein which catalyzes the conversion of orthophosphoric monoester to alcohol and orthophosphate. It is the most basic of the acid phosphatases and is the only form not inhibited by L(+)-tartrate. [provided by RefSeq, Aug 2008]

**Product images:**



Circular map for RC225473



Western blot validation of overexpression lysate (Cat# [LY426342]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC225473 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).