

## Product datasheet for **MR206733**

### **Acp2 (NM\_007387) Mouse Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	Acp2 (NM_007387) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Acp2
Synonyms:	Acp; Acp-2; LAP
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide Sequence:**

>MR206733 ORF sequence  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGGCCGGCAGACAGACTGGTTGGAGCCAGGCGGCTCTTCTCCAGTTCCTTCTTGGCATGTGCCTAACGG  
 TGATGCCACCCATACAGGCCGGAGTCTACGCTTTGTTACCTTGCTGTATCGACATGGAGATCGGTCAAC  
 AGTGAAGACATATCCCAAGGACCCCTATCAGGAAGAGAAATGGCCCCAGGGATTTGGTCAGCTAACCAAG  
 GAAGGGATGCTACAGCACTGGGAGCTGGGCCAGGCCCTGCGGCAACGCTACCATGGCTTTCTGAACACCT  
 CTTACCACAGGCAAGAGGTTTATGTGCGAAGCACAGACTTCGATCGTACTCTCATGAGTGTGAGGCCAA  
 CCTGGCTGGACTTCCCTCCCAATGAAGTTCAGCACTCAACCCTAACATTTTCATGGCAGCCTATCCCT  
 GTTCACACTGTGCCATCACTGAAGACAGGTTGCTGAAGTTTCTTTGGTCCATGTCCCGTTATGAGC  
 AGCTGCAGAAATGAGACTCGGCAGACACCAGAGTATCAGAACAGAAGTATTCAGAATGCACAATTTCTGAA  
 CATGGTGGCCAAACGAGACAGGGCTTACAAACGTGACCCTAGAGACCATCTGGAATGTGTATGACACACTC  
 TTTTGTGAGCAAACCCATGGGCTGCTTCTGCCGCCCTGGGCCCTACCCCAAACCGTGCAGCGTCTGAGCC  
 AGCTAAAGGACTTCAGCTTCTTCTTCTTCCGGATCCACGAGCAAGTACAGAAGGCCCGGCTTACGGG  
 GGGAGTTCTGCTGGCTCAGATATTGAAGAACCTGACCCTAATGGCAACTACCTCTCAATTCCTAAGCTT  
 CTGGTTTATTCGCGCATGACACTACCCTGGTTGCTCTGCAATGGCATTGAATGTCTACAATGGGAAGC  
 AAGCTCCCTATGCTTCTGCCACATATTTGAACGTACCAGGAAGATAATGGGAATTTCTCAGTCGAGAT  
 GTACTTTCGGAATGACAGTAAGAAGGCACCCTGGCCTCTGATCCTGCCTGGCTGTCTCACCGTTGCCCA  
 CTGCAGGATTTCTTTCGCTCACAGAGCCTGTATACCCAAGGACTGGCAGAAGGAGTCCAGCTAGCAA  
 ATGATACTGCAGACACAGAGGTAATTGTGGCATTGGCTGTCTGTGGCTCCATCCTTCTCCTCATAGT  
 GTTGCTCTCACCATCCTTCCGGATGCAGGCCACGCTCCTGGCTACCACCATGTTGCAGACAGGGAA  
 GACCATGCT

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>MR206733 protein sequence  
 Red=Cloning site Green=Tags(s)

MAGRQTGWSQAALLQFLLGMCLTVMPPIQARSLRFVTLRYRHGDRSPVKTYPKDPYQEEKWPQGFQGLTK  
 EGMLQHWELGQALRQRYHGFNLNTSYHRQEVYVVRSTDFDRTLMSAEANLAGLFPNEVQHFNPNIWQPIIP  
 VHTVPI TEDRLKFP LGPCPRYEQ LQNETRQTPEYQNR SIQNAQFLNMVANETGLTNVTLETIWNVYDTL  
 FCEQTHGLLLPPWASPQTVQRLSQLKDFSFLFLFGIHEQVQKARLQGGVLLAQILKNLTLMATTSQFPKL  
 LVYSAHDTTLVALQMALNVYNGKQAPYASCHIFELYQEDNGNFSVEMYFRNDSKKAPWPLILPGCPHRCPL  
 QDFLRLTEPVIKDWQKECQLANDTADTEVIVALAVCGSILFLLIVLLLITLFRMQAQPYPGYHHVADRE  
 DHA

**TR**TRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:**

SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_007387

**ORF Size:** 1269 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\\_007387.2](#)

**RefSeq Size:** 4669 bp

**RefSeq ORF:** 1272 bp

**Locus ID:** 11432

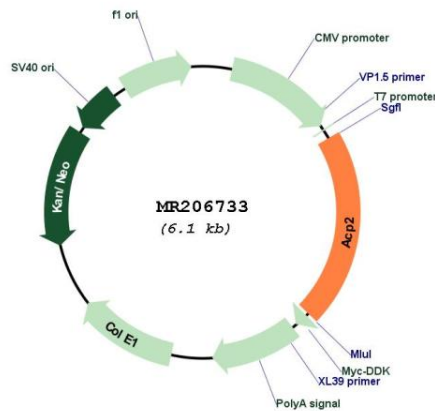
UniProt ID: [P24638](#)

Cytogenetics: 2 50.54 cM

MW: 48.5 kDa

**Gene Summary:** The protein encoded by this gene belongs to the histidine acid phosphatase family, which hydrolyze orthophosphoric monoesters to alcohol and phosphate. This protein is localized to the lysosomal membrane, and is chemically and genetically distinct from the red cell acid phosphatase. Mice lacking this gene showed multiple defects, including bone structure alterations, lysosomal storage defects, and an increased tendency towards seizures. An enzymatically-inactive allele of this gene showed severe growth retardation, hair-follicle abnormalities, and an ataxia-like phenotype. Two isoforms are predicted to be produced from the same mRNA by the use of alternative in-frame translation termination codons via a stop codon readthrough mechanism. [provided by RefSeq, Oct 2017]

**Product images:**



Circular map for MR206733