

## Product datasheet for **SC325537**

### Acid Phosphatase 2 (ACP2) (NM\_001131064) Human Untagged Clone

#### Product data:

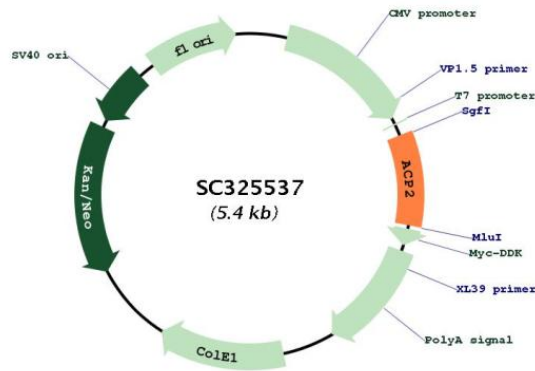
Product Type:	Expression Plasmids
Product Name:	Acid Phosphatase 2 (ACP2) (NM_001131064) Human Untagged Clone
Tag:	Tag Free
Symbol:	ACP2
Synonyms:	acid phosphatase 2, lysosomal; Acp-2; LAP; OTTMUSP00000015308
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>SC325537 representing NM_001131064. Blue=Insert sequence Red=Cloning site Green=Tag(s)

```
GCTCGTTTAGTGAACCGTCAGAATTTTGTAAACGACTCACTATAGGGCGCCGGGAATTCGTCGACTG
GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC
ATGGCGGGCAAGCGGTCCGGCTGGAGCCGGGCGGCTCTCCTCCAGCTCCTTCTCGGCGTGAACCTGGTG
GTGATGCCGCCACCCGGGCCGGAGTCTGCGCTTCGTTACCTTGCTGTACCGCCATGGAGACCGTTCA
CCAGTGAAGACATATCCAAGGACCCCTATCAGGAAGAAGAATGGCCCCAGGGGTTTGGTCAGTTAACC
AAGGAGGGGATGCTACAGCACTGGGAAGTGGGCCAGGCCCTGCGGCAGCGCTATCACGGCTTCTAAAC
ACCTCTTATCACCGCAAGAGGTTTATGTGCGAAGCACAGACTTTGACCGGACTCTCATGAGTGTGAG
GCCAACCTGGCTGGACTTTCCTCCCAACGGGATGCAGCGCTTCAACCCGAACATCTCGTGGCAGCCT
ATTCTGTGCACACTGTGCCATCACTGAGGACAGGGTAAGAGTGGCCAGCCCTTCCTGGGGTGGTGA
ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGAT
TACAAGGATGACGACGATAAGGTTTAAACGGCCGCC
```

Restriction Sites: Sgfl-Mlul



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**Plasmid Map:**


<b>ACCN:</b>	NM_001131064
<b>Insert Size:</b>	483 bp
<b>OTI Disclaimer:</b>	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
<b>OTI Annotation:</b>	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.
<b>Components:</b>	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\\_001131064.1](#)

**RefSeq Size:** 730 bp

**RefSeq ORF:** 483 bp

**Locus ID:** 53

**Cytogenetics:** 11p11.2|11p12-p11

**Protein Families:** Druggable Genome, Transmembrane

**Protein Pathways:** Lysosome, Riboflavin metabolism

**MW:** 18.4 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 in mice showed severe growth retardation, hair-follicle abnormalities, and an ataxia-like phenotype. Alternatively spliced transcript variants have been found for this gene. A C-terminally extended isoform is also predicted to be produced by the use of an alternative in-frame translation termination codon via a stop codon readthrough mechanism. [provided by RefSeq, Oct 2017]

Transcript Variant: This variant uses a different splice site in the 3' coding region and is much shorter, compared to variant 1. The predicted protein (isoform 2) has a shorter and distinct C-terminus when it is compared to isoform 1.