

Product datasheet for **SC335613**

Acid Phosphatase 2 (ACP2) (NM_001302491) Human Untagged Clone

Product data:

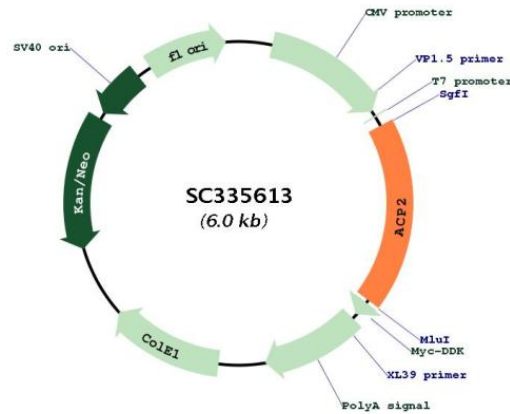
| | |
|---------------------------|--|
| Product Type: | Expression Plasmids |
| Product Name: | Acid Phosphatase 2 (ACP2) (NM_001302491) Human Untagged Clone |
| Tag: | Tag Free |
| Symbol: | ACP2 |
| Synonyms: | LAP |
| Mammalian Cell Selection: | Neomycin |
| Vector: | pCMV6-Entry (PS100001) |
| E. coli Selection: | Kanamycin (25 ug/mL) |
| Fully Sequenced ORF: | >SC335613 representing NM_001302491. Blue=Insert sequence Red=Cloning site Green=Tag(s) |

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GCTCGTTTGTAGTAACCGTCAGAATTTTGTAAACGACTCACTATAGGGCGCCGGGAATTCGTCGACTG
GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC
ATGGCGGGCAAGCGGTCCGGCTGGAGCCGGGCGGCTCTCCTCCAGCTCCTTCTCGGCGTGAACCTGGTG
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CAGCCTCCTGGCTACCGCCACGTGCGAGATGGGGAGGACCACGCCTGA
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TACAAGGATGACGACGATAAGGTTTAAACGGCCGGC
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Restriction Sites: SgfI-MluI



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Plasmid Map:


ACCN: NM_001302491

Insert Size: 1083 bp

OTI Disclaimer: 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).

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_001302491.1](#)

RefSeq Size: 1970 bp

RefSeq ORF: 1083 bp

Locus ID: 53

UniProt ID: [P11117](#)

Cytogenetics: 11p11.2|11p12-p11

Protein Families: Druggable Genome, Transmembrane

Protein Pathways: Lysosome, Riboflavin metabolism

MW: 41 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 (5) lacks two consecutive in-frame exons in the 5' coding region compared to variant 1. The encoded shorter isoform (5) lacks an internal protein segment compared to isoform 1.