

Product datasheet for **SC334692**

Acid Phosphatase 2 (ACP2) (NM_001302492) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Acid Phosphatase 2 (ACP2) (NM_001302492) Human Untagged Clone
Tag:	Tag Free
Symbol:	Acid Phosphatase 2
Synonyms:	LAP
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>NCBI ORF sequence for NM_001302492, the custom clone sequence may differ by one or more nucleotides

ATGGTGGCCAACGAGACAGGGCTTACAGACCTGACACTGGAGACCGTCTGGAATGTCTATGACACACTCT
 TCTGTGAGCAAACGCACGGGCTGCGCCTGCCGCTGGGCTCACCCCAAACCATGCAGCGTCTCAGCCG
 GCTAAAGGACTTCAGCTTCCGCTTCTTTCGGAATCTACCAGCAGGCGGAGAAGGCCCGGCTTCAGGGG
 GGAGTCTGCTGGCTCAGATAAGGAAGAACCTGACCTAATGGCGACCACCTCCAGCTCCCAAGCTGC
 TGGTTTACTCTGCGCACGACACTACCCTGGTTGCCCTGCAAATGGCACTGGATGTCTACAATGGTGAACA
 AGCCCCCTACGCCTCCTGCCACATATTTGAAGTGTACCAGGAAGATTCTGGGAATTTCTCAGTGGAGATG
 TACTTTTCGGAACGAGAGTGACAAGGCCCCCTGGCCGCTCAGCCTGCCTGGCTGCCCTCACCGCTGCCCCAC
 TGCAGGACTTCCTTCGCCTCACAGAGCCCGTCGTGCCCAAGGATTGGCAGCAGGAGTGCCAGCTGGCAAG
 CGGTCCTGCAGACACAGAGGTGATTGTGGCCTTGCTGTATGTGGCTCCATCCTCTTCTCCTCATAGTG
 CTGCTCCTCACCGTCCTTCCGGATGCAGGCCAGCCTCCTGGCTACCGCCACGTGCGAGATGGGGAGG
 ACCACGCCTGA

Restriction Sites:	Sgfl-MluI
ACCN:	NM_001302492
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).


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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:	<ol style="list-style-type: none"> 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:	<u>NM_001302492.1, NP_001289421.1</u>
RefSeq Size:	2088 bp
RefSeq ORF:	711 bp
Locus ID:	53
UniProt ID:	<u>P11117</u>
Cytogenetics:	11p11.2 11p12-p11
Protein Families:	Druggable Genome, Transmembrane
Protein Pathways:	Lysosome, Riboflavin metabolism
Gene Summary:	<p>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]</p> <p>Transcript Variant: This variant (6) lacks an internal exon and uses an alternate acceptor splice site in the 5' region compared to variant 1. These differences result in translation initiation at an in-frame downstream start codon compared to variant 1. The encoded isoform (6) has a shorter N-terminus compared to isoform 1.</p>