

Product datasheet for **MC212053**

Adprhl2 (NM_133883) Mouse Untagged Clone

Product data:

Product Type: Expression Plasmids
Product Name: Adprhl2 (NM_133883) Mouse Untagged Clone
Tag: Tag Free
Symbol: Adprhl2
Synonyms: AI836109; Arh3
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
Cell Selection: Neomycin
Fully Sequenced ORF: >MC212053 representing NM_133883
Red=Cloning site **Blue**=ORF **Orange**=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**GCGATCGC**C

ATGGCGGTGGCTGCGCGGCAGCAGCTACAGCGATGTCGGCGCGGGGGCGCGGGGCAAGTGC GGCC
GCTCCATCTCGCCTCCGAGGTTGCCTGGCGGCGCGCTGCTGGGAGATTGCGTGGCGCTGTCTACGA
GGCACACGATACCGTCAGCCTGGCATCAGTCCTGAGTCAGTCGAGAGCCTGGAGCCGACCCGGGCACG
CCGGGCAGCGCGGACAGAGACTGTACTACACAGATGACACTGCCATGACCAGGGCCCTGGTGCAGT
CCCTGCTGGCCAAGGAGGCCCTTCGACGAGGTGGACATGGCTCACAGGTTTGCCCAAGGAAACAAGAAGGA
CCCTGACAGAGGGTATGGGGCCGGAGTCATCACTGTCTTCAAGAACTCCTGAATCCCAAGTGCCGTGAT
GTCTATGAGCCTGCCCGGCCAGTTCAACGGGAAGGTTCTATGGCAATGGGGGTGCCATGCGGGTAG
CAGGCATCTCGCTGGCCTATAGCAGTGTCCAAGATGTACAGAAGTTTGCCCGCTCTCGGCCAGCTGAC
CCACGCCCTTCCCTGGGCTATAACGGTGCCATCTTGACGGCCCTGGCTGTGCACCTGCTCTGCAGGT
GTATCATCCAGTGAGCACTTCTTGAGCAGCTTCTGGCCACATGGAGGAGCTGGAAGGTGATGCCCAAT
CGGTCTTGACGCAAGGAGTTGGGTATGGAGGAGCGTCCGTACTCCAGCAGGCTGAAGAAGTGGAGAG
GCTGCTGGACCAGGACGTGGTGAGCCGAGAGGAAGTGGTGTCCGAGCTAGGGAATGGCATTGCCGCCTTT
GAATCTGTGCCACCGCCATCTACTGCTTCTGCGCTGCATGGAGCCTCACCTGAGATCCCTCCACCT
TCAACAGTCTCCAGAGGACTCTCATCTACTCCATCTCACTTGGTGGGACACAGACACCATAGCCACCAT
GGCTGGGGCCATTGCTGGAGCTTACTATGGGATGGAACAGGTGCCGGAGAGCTGGCAGCAAAGTTGTGAA
GGCTTTGAGGAGACAGACGTCCTGGCCAGAGCCTGCACCGAGTCTCCAGGAGAGCTCG**TAA**

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites: SgfI-MluI
ACCN: NM_133883



Insert Size:	1113 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:	<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_133883.2</u> , <u>NP_598644.1</u>
RefSeq Size:	1368 bp
RefSeq ORF:	1113 bp
Locus ID:	100206
UniProt ID:	<u>Q8CG72</u>
Cytogenetics:	4 D2.2
Gene Summary:	<p>ADP-ribose glycohydrolase that preferentially hydrolyzes the scissile alpha-O-linkage attached to the anomeric C1" position of ADP-ribose and acts on different substrates, such as proteins ADP-ribosylated on serine, free poly(ADP-ribose) and O-acetyl-ADP-D-ribose (By similarity). Specifically acts as a serine mono-ADP-ribosylhydrolase by mediating the removal of mono-ADP-ribose attached to serine residues on proteins, thereby playing a key role in DNA damage response (By similarity). Serine ADP-ribosylation of proteins constitutes the primary form of ADP-ribosylation of proteins in response to DNA damage (By similarity). Does not hydrolyze ADP-ribosyl-arginine, -cysteine, -diphthamide, or -asparagine bonds (By similarity). Also able to degrade protein free poly(ADP-ribose), which is synthesized in response to DNA damage: free poly(ADP-ribose) acts as a potent cell death signal and its degradation by ADPRHL2 protects cells from poly(ADP-ribose)-dependent cell death, a process named parthanatos (PubMed:24191052). Also hydrolyzes free poly(ADP-ribose) in mitochondria (By similarity). Specifically digests O-acetyl-ADP-D-ribose, a product of deacetylation reactions catalyzed by sirtuins (By similarity). Specifically degrades 1"-O-acetyl-ADP-D-ribose isomer, rather than 2"-O-acetyl-ADP-D-ribose or 3"-O-acetyl-ADP-D-ribose isomers (By similarity). [UniProtKB/Swiss-Prot Function]</p>