

Product datasheet for **MG205710**

Adprhl2 (NM_133883) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Adprhl2 (NM_133883) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Adprhl2
Synonyms:	AI836109; Arh3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>MG205710 representing NM_133883 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCGGTGGCTGCGCGGCAGCAGCTACAGCGATGTCGGCGCGGGGGCGCGGGGCAAGTGC GGCC
GCTCCATCTCGCGCTTCCGAGGTTGCCTGGCGGGCGCGTGTGGGAGATTGCGTGGGCGCTGTCTACGA
GGCACACGATACCGTCAGCCTGGCATCAGTCTGAGTACGTCGAGAGCCTGGAGCCGGACCCGGGCAGC
CCGGGCAGCGCGGACACAGACTGTACTACACAGATGACTGCCATGACCAGGCCCTGGTGCAGT
CCCTGCTGGCCAAGGAGCCTTCGACGAGTGGACATGGCTCACAGGTTTGGCCAGGAACAAGAAGGA
CCCTGACAGAGGGTATGGGGCCGAGTCATCACTGCTTCAAGAACTCCTGAATCCAAGTGCCGTGAT
GTCTATGAGCCTGCCCGGCCAGTTCAACGGGAAGGTTCTATGGCAATGGGGTGCCATGCGGGTAG
CAGGCATCTCGCTGGCCTATAGCAGTGTCCAAGATGTACAGAAGTTTGGCCGGCTCTCGGCCAGCTGAC
CCACGCCCTTCCCTGGGCTATAACGGTGCCATCTTGACAGGCCCTGGCTGTGCACCTTGCTGCAGGGT
GTATCATCCAGTGAGCACTTCTTGAGCAGCTTCTGGGCCACATGGAGGAGCTGGAAGGTGATGCCAAT
CGGTCTTGACGCCAAGGAGTTGGGTATGGAGGAGCGTCCGACTCCAGCAGGCTGAAGAAGGTCCGAGA
GCTGCTGGACCAGGACGTGGTGAGCCGAGAGGAAGTGGTCCGAGCTAGGAATGGCATTGCCGCCTTT
GAATCTGTGCCACCGCCATCTACTGCTTCTGCGCTGCATGGAGCCTCACCTGAGATCCCCTCCACCT
TCAACAGTCTCCAGAGGACTCTCATCTACTCCATCTCACTTGGTGGGGACACAGACCATAGCCACCAT
GGCTGGGGCCATTGCTGGAGCTTACTATGGGATGGAACAGGTGCCGGAGAGCTGGCAGCAAGTTGTGAA
GGCTTTGAGGAGACAGACGTCCTGGCCAGAGCCTGCACCGAGTCTTCCAGGAGAGCTCG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



[View online »](#)

Protein Sequence: >MG205710 representing NM_133883
 Red=Cloning site Green=Tags(s)

MAVAAAAAATAMSAAGGGGASAARSISRFRGCLAGALLGDCVGAVYEAHDTVSLASVLSHVESLEPDPGT
 PGSARTQTLYYTDDTAMTRALVQSLLAKEAFDEVDMHRFAQEYKDPDRGYGAGVITVFKKLLNPKCRD
 VYEPARAQFNKGSGYNGGAMRVAGISLAYSSVQDVQKFARLSAQLTHASSLGYNGAILQALAVHLALQG
 VSSSEHFLEQLLGHMEELEGDAQSVLDAKELGMEERPYSRLKKVGEELLDQDVVSREEVSELGNGIAAF
 ESVPTAIYCFRLRMEPHPEIPSTFNSLQRTLIIYSISLGGDDTIATMAGAIAGAYYGMEQVPEWSQQSCE
 GFEETDVLAQSLHRVFQESS

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_133883

ORF Size: 1110 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.

RefSeq: [NM_133883.2](#), [NP_598644.1](#)

RefSeq Size: 1368 bp

RefSeq ORF: 1113 bp

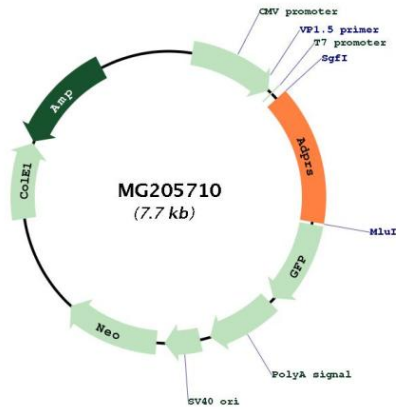
Locus ID: 100206

UniProt ID: [Q8CG72](#)

Cytogenetics: 4 D2.2

Gene Summary: 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]

Product images:



Circular map for MG205710