

Product datasheet for **MR217976**

Aplf (NM_024251) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Aplf (NM_024251) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Aplf
Synonyms:	2010301N04Rik; AI452191
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>MR217976 representing NM_024251
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGCCAGCGTGCCTGAGGGAGGTGGCTACGAGATAACAGACAAAAGAGTATCCAGAAGACATGCCATTC
 TTGAAGTGGTTGATAGTCAGCTTCAATCAAGCCAATCCATAGGAATCCATGTTTCTACCACTCCTCGGA
 GAAGAGCCAACACTCGCCAATGGAGACGCAAGTGTGGAGCCAGTTGCATCCCGGGGATAGCTTTTCCCTG
 TTACTIONGACAAGTACGCTTTCCGTGTTTCTCTGCAGAATCTGAAGTGGAGATGGAGTGTACTCTGAGAA
 ACAGTCAGATGCTTGTGAAGATGATATATTGAGTGAAGTGCAGAAGTCCCCTGTGGTTAACTTACCTGA
 TAAGACAACACTGGTGCCTCACAGCTGCAAGGAAGCCCTGAAATAACCAAGACCAAGTGTCCCACCATAGAT
 CCTATGTCCTCTCAGGTGAATGCAGAGCTTTCAGTGAGCACCAGCCACGTCTACCCAGAGGAAAAGAA
 TCCTCCCAGCTTGGATGTTGGCGGAAAGTCTAAGTGACCAGAGCCCTCCACACCAGCTGAGGGGGGAGA
 TAAGGATGTCATCCAGAGGAGTGGAAAAGCAGGAACCTGTGAAGATAGAACCCAGGAAACACATCATGG
 CATGGGAAAAAGCGGCTTAGTCCATCAGGAAATCAAAAAGTGTGTGACGGGAACAGACCTGGGAAGA
 AGTGACAGAAAGGCTGACCAAGAAGGACCGGGTGTTCCTCTGAGAATGTTCCAGAATCATCATCTTCAAA
 CATAGTAAAGGACCCAGATGTGGATATTGTGAAGACAAAACAGAAAGGACGGGATTTTAAAGAGGAA
 CTTGGTGAGGTCTCTAACATAAAGCCGCCACCAACCAACCAAAATGAAGAGGGCGAGAGTTGTGCAC
 GTGTCCAAAGCAAGTACCTCCTGAGAAATCTCAAGGATGCCATCCTGAGTCTAGCTCTGCTCCCTCCAG
 TCCTGATGCTTTGACACAGACACAGCTGACCCAGTGTGGGCTGTTGAGAAGAAAGCAAGTCCGGAGG
 ACGGCTGCATGATGGGGCAACTGCTACAGGAGGAACCCCTCCACTTCAACACTTACGCCACCCTG
 GTGACAGTGACTATGGAGAGGTACATGGCACAGATGAAGGTGTGATTGGTGACAGGCCGAGTGTCCCTA
 TGGAGCGTCTTGTACAGGAAGAACCCCAAGCACAAGATGGAATATAGGCACAGTGCACCTCCAGCCAGA
 GTTGCTCTGGATGAAGATGACGATGATGTCGGGCAACCCAGTGCAGATGAGGACGAGGAAGACTATGAGC
 CGACAGATGAAGATTCTGATTGGCACCCAGGAAAGGACGATGAGGAGCAGGAAGATGTGGATGAGCTTTT
 GAAAGAAGCAAAAAGTTTATGAGAAGGAAAAAG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>MR217976 representing NM_024251
 Red=Cloning site Green=Tags(s)

MPSVPEGGGYEITDKRVSRRHAILEVVDSQLRIKPIHRNPCFYQSSEKSQLHSPMETQVWSQLHPGDSFSL
 LLDKYAFRVFSAESEVEMECTLRNSQMLDEDDILSEMOKSPVVNLPDKTTGASQLQGSPEITKTKCPTID
 PMSSSGECRAFSEHQPRPTQQRKILPAWMLAESLSDQSLSTPAEGGDKDVIQRSGKAGTCEDRTPGNTSW
 HGKKRLSPSGNSKSVSAEQDPGKCRKADQEGPGVSSENVPESSSNIVKDPDVIDVKTNKQKDGILIEE
 LGEVSKHKAATKPTTNEEGESCARVQSKSPPEKSQGCHPESSAPSPDALHTDTADPVLGCSEESKVR
 TACMYGANCYRRNPLHFQHFHPGDSYGEVHGTDEGVIHDRPECPYGASCYRKNPQHKMEYRHSALPAR
 VALDEDDDDVQPSDEDEEDYEPTDESDWHPGKDDEEQEDVDELLKEAKRFMRKK

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

Sgfl-MluI

Cloning Scheme:



ACCN: NM_024251

ORF Size: 1434 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_024251.4](#), [NP_077213.2](#)

RefSeq Size: 3148 bp

RefSeq ORF: 1437 bp

Locus ID: 72103

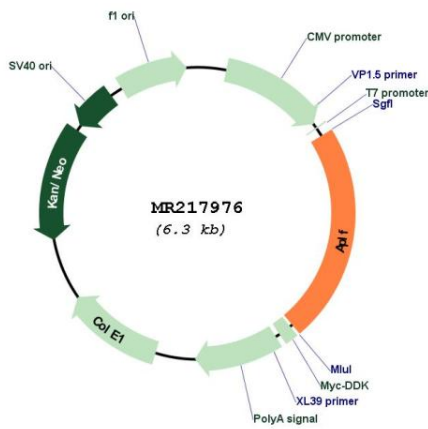
UniProt ID: [Q9D842](#)

Cytogenetics: 6 D1

MW: 53.5 kDa

Gene Summary: Nuclease involved in single-strand and double-strand DNA break repair. Recruited to sites of DNA damage through interaction with poly(ADP-ribose), a polymeric post-translational modification synthesized transiently at sites of chromosomal damage to accelerate DNA strand break repair reactions. Displays apurinic-apyrimidinic (AP) endonuclease and 3'-5' exonuclease activities in vitro. Also able to introduce nicks at hydroxyuracil and other types of pyrimidine base damage. Together with PARP3, promotes the retention of the LIG4-XRCC4 complex on chromatin and accelerate DNA ligation during non-homologous end-joining (NHEJ).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR217976