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Product datasheet for MC204878

Apex2 (NM_029943) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Apex2 (NM_029943) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Apex2
Synonyms:	ape2; C430040P13Rik
Mammalian Cell Selection:	Neomycin
Vector:	PCMV6-Kan/Neo (PCMV6KN)
E. coli Selection:	Kanamycin (25 ug/mL)

Fully Sequenced ORF:

>BC078633
CTTCCTTTGGGAAACTGTACCGTTTACCAAAATGCTGCGCGTGGTAAGCTGGAACATCAATGGGATCCGG
AGTCCCCTGCAAGGCCTTGCATGCCAGGAACCCAGCAGCTGTCCCACGGCCTTGCGACGCGTTTTGGACG
AGCTGGATGCTGATATTGTCTGTCTCCAGGAGACCAAAGTGACCAGAGATGTACTGACAGAGCCCCTGGC
TATTGTTGAGGGTTATAACTCCTATTTCAGCTTCAGCCGCAGCCGTAGTGGCTATTCTGGTGTGGCTACC
TTCTGTAAGGACAGTGCTACCCCAGTAGCTGCTGAAGAAGGCCTGAGTGGTGTGTTTGCCACCCTGAATG
GAGATATTGGTTGCTATGGAAACATGGATGAGTTCACGCAAGAGGAACTCCGGGTTCTGGATAGTGAGGG
CCGGGCCCTCCTTACACAGCACAAGATCCGCACATTGGAAGGGAAGGAGAAGACTTTGACCCTGATCAAT
GTGTACTGCCCTCACGCGGATCCTGGGAAGCCTGAGCGGCTGACCTTCAAGATGCGCTTCTATCGCCTGC
TCCAGATGCGAGCAGAAGCGCTCCTGGCAGCTGGCAGTCACGTGATAATCCTGGGGGACCTGAATACAGC
CCACCGACCCATTGACCACTGCGATGCAAGTAGTCTGGAATGCTTTGAAGAGGACCCAGGGCGTAAGTGG
ATGGATGGCTTGCTCAGTAACCCAGGGGATGAGGCTGGACCCCACATAGGGCTCTTCATGGATAGCTACC
GCTACTTGCATCCAAAACAGCAGAGGGCTTTCACCTGCTGGTCAGTGGTCAGTGGTGCACGCCATCTCAA
CTATGGCTCTAGACTTGACTATGTACTGGGAGATAGGGCCTTGGTCATAGATACCTTCCAGGCCTCCTTC
TTACTCCCTGAAGTGATGGGCTCTGACCACTGCCCTGTGGGAGCTGTCTTAAATGTATCCTGTGTGCCAG
CAAAACAGTGCCCAGCTCTGTGTACCCGCTTCCTCCCCGAGTTTGCAGGTACCCAGCTCAAGATTCTTCG
CTTCCTAGTTCCTCTTGAGCAAGAACCTGTGCGGGAACAGCAAGTCCTGCAGCCCAGCCATCAAATCCAG
GCACAGAGACAGCCAAGAAAAGCCTGCATGCATTCAACCAGGCTTCGGAAAAGTCAAGGTGGCCCCAAAA
GAAAACAGAAAAACCTGATGAGTTACTTCCAGCCTTCCTCCAGCCTTTCCCAAACTTCTGGTGTGGAGCT
GCCTACCCTGCCTCTGGTGGGCCCTCTTACAACCCCAAAGACTGCAGAAGAGGTGGCAACAGCCACAGTG
CTAGAAGAGAAGAACAAGGTTCCAGAGTCCAAAGATGAGAAGGGAGAAAGGACTGCCTTCTGGAAGTCTA
TGCTGAGTGGGCCCTCACCCATGCCCCTCTGTGGAGGCCACAGGGAGCCATGTGTGATGCGTACTGTGAA
AAAAACAGGACCCAACTTTGGTCGCCAGTTCTACATGTGTGCTAGACCCCGAGGTCCTCCCAGTGACCCC
TCTTCCCGCTGTAACTTCTTCCTCTGGAGCAGGCCCAGCTGAACAGACTGAGGCATAGGGATGTCTTCGT
GTTCACCCCGTGCATGGGGTCAGATGCCAGGTCCCTGCCTATGAAGGCTTCTTTTTGTTCTCTGCTTTCC
CTCCACTCCTTCCCTTCTCCCCCTAATGCCTCTCCCCTTTCACATCTCTGTTTCTTCCTCTTTGCACATG
GAGGAGCAGGGAACTAATTTAATCCCCTTCAACCCTTGTTAGGGCATAAATAACATTTTGTTCATAAATA
AAGGTCACGTCTTTGTTTCAGTAAAAAAAAAAAAAAA

Restriction Sites: RsrII-NotI

ACCN: NM_029943

Insert Size: 1551 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: BC078633, AAH78633

RefSeq Size:	1857 bp
RefSeq ORF:	1551 bp
Locus ID:	77622
UniProt ID:	Q68G58
Cytogenetics:	X F3
Gene Summary:	Function as a weak apurinic/apyrimidinic (AP) endodeoxyribonuclease in the DNA base excision repair (BER) pathway of DNA lesions induced by oxidative and alkylating agents. Initiates repair of AP sites in DNA by catalyzing hydrolytic incision of the phosphodiester backbone immediately adjacent to the damage, generating a single-strand break with 5'-deoxyribose phosphate and 3'-hydroxyl ends. Displays also double-stranded DNA 3'-5' exonuclease, 3'-phosphodiesterase activities. Shows robust 3'-5' exonuclease activity on 3'-recessed heteroduplex DNA and is able to remove mismatched nucleotides preferentially. Shows fairly strong 3'-phosphodiesterase activity involved in the removal of 3'-damaged termini formed in DNA by oxidative agents. In the nucleus functions in the PCNA-dependent BER pathway. Required for somatic hypermutation (SHM) and DNA cleavage step of class switch recombination (CSR) of immunoglobulin genes. Required for proper cell cycle progression during proliferation of peripheral lymphocytes.[UniProtKB/Swiss-Prot Function]