

Product datasheet for **TP508278**

Apex2 (NM_029943) Mouse Recombinant Protein

Product data:

Product Type:	Recombinant Proteins
Description:	Purified recombinant protein of Mouse apurinic/aprimidinic endonuclease 2 (Apex2), with C-terminal MYC/DDK tag, expressed in HEK293T cells, 20ug
Species:	Mouse
Expression Host:	HEK293T
Expression cDNA Clone or AA Sequence:	>MR208278 protein sequence Red =Cloning site Green =Tags(s)

MLRVSWNINGIRSPLQGLACQEPSSCPTALRRVLDDELADIVCLQETKVTRDVLTEPLAIVEGYNSYFS
FSRSRSGYSGVATFCKDSATPVAAEEGLSGVFATLNGDIGCYGNMDEFTQEELRVL DSEGRALLTQHKIR
TLEGKEKTLTLINVYCPHADPGKPERLTFKMRFYRLLQMRAEALLAAGSHVILGDLNHTAHRPIDHCDAS
SLECFEEDPGRKWMDGLLSNPGDEAGPHIGLFMDSYRYLHPKQQRRAFTCWSVSGARHLNYGSRLDYVLG
DRALVIDTFQASFLPEVMGSDHCPVGAVLNVSCVPAKQCPALCTRFLPEFAGTQLKILRFLVPLEQEPV
REQQVLQPSHQIQAQRQPRKACMHSTRLRKSQGGPKRKQKNLMSYFQPSSSLSTSGVELPTLPLVGPLT
TPKTAEEVATATVLEEKNKVPEKDEKGERTAFWKSMLSGPSPMPLCGGHRPCVMRTVKKTGPNFGRQF
YMCARPRGPPSDPSSRCNFFLWSRPS

SGPTRTRPLEQKLISEEDLAANDILDYKDDDDKV

Tag:	C-MYC/DDK
Predicted MW:	57.3 kDa
Concentration:	>0.05 µg/µL as determined by microplate BCA method
Purity:	> 80% as determined by SDS-PAGE and Coomassie blue staining
Buffer:	25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol
Note:	For testing in cell culture applications, please filter before use. Note that you may experience some loss of protein during the filtration process.
Storage:	Store at -80°C after receiving vials.
Stability:	Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles.
RefSeq:	<u>NP_084219</u>



[View online »](#)

Locus ID: 77622

UniProt ID: [Q68G58](#), [A2AFM3](#)

RefSeq Size: 1903

Cytogenetics: X F3

RefSeq ORF: 1551

Synonyms: ape2; C430040P13Rik

Summary: Function as a weak apurinic/aprimidinic (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]