

APEX1 Antibody (monoclonal) (M02)

Mouse monoclonal antibody raised against a partial recombinant APEX1.

Catalog # AT1160a

Product Information

Application	E
Primary Accession	P27695
Other Accession	NM_001641
Reactivity	Human
Host	mouse
Clonality	monoclonal
Isotype	IgG1 Kappa
Clone Names	4D1
Calculated MW	35555

Additional Information

Gene ID	328
Other Names	DNA-(apurinic or apyrimidinic site) lyase, 31--, APEX nuclease, APEN, Apurinic-apyrimidinic endonuclease 1, AP endonuclease 1, APE-1, REF-1, Redox factor-1, DNA-(apurinic or apyrimidinic site) lyase, mitochondrial, APEX1, APE, APE1, APEX, APX, HAP1, REF1
Target/Specificity	APEX1 (NP_001632, 219 a.a. ~ 318 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
Dilution	E~~N/A
Format	Clear, colorless solution in phosphate buffered saline, pH 7.2 .
Storage	Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.
Precautions	APEX1 Antibody (monoclonal) (M02) is for research use only and not for use in diagnostic or therapeutic procedures.

Background

Apurinic/apyrimidinic (AP) sites occur frequently in DNA molecules by spontaneous hydrolysis, by DNA damaging agents or by DNA glycosylases that remove specific abnormal bases. AP sites are pre-mutagenic lesions that can prevent normal DNA replication so the cell contains systems to identify and repair such sites. Class II AP endonucleases cleave the phosphodiester backbone 5' to the AP site. This gene encodes the major AP endonuclease in human cells. Splice variants have been found for this gene; all encode the same protein.

References

Polymorphic DNA repair and metabolic genes: a multigenic study on gastric cancer. Palli D, et al. *Mutagenesis*, 2010 Sep 3. PMID 20817763. Association between single-nucleotide polymorphisms of selected genes involved in the response to DNA damage and risk of colon, head and neck, and breast cancers in a Polish population. Jelonek K, et al. *J Appl Genet*, 2010. PMID 20720310. A large-scale candidate gene approach identifies SNPs in SOD2 and IL13 as predictive markers of response to preoperative chemoradiation in rectal cancer. Ho-Pun-Cheung A, et al. *Pharmacogenomics J*, 2010 Jul 20. PMID 20644561. Maternal genes and facial clefts in offspring: a comprehensive search for genetic associations in two population-based cleft studies from Scandinavia. Jugessur A, et al. *PLoS One*, 2010 Jul 9. PMID 20634891. Crystallization and preliminary X-ray analysis of human endonuclease 1 (APE1) in complex with an oligonucleotide containing a 5,6-dihydrouracil (DHU) or an alpha-anomeric 2'-deoxyadenosine (alphanA) modified base. Retailleau P, et al. *Acta Crystallogr Sect F Struct Biol Cryst Commun*, 2010 Jul 1. PMID 20606276.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.