

APEX2 rabbit pAb

Catalog No :	YT6699
Reactivity :	Human;Mouse
Applications :	WB
Target :	APEX2
Fields :	>>Base excision repair
Gene Name :	APEX2 APE2 APEXL2 XTH2
Protein Name :	APEX2
Human Gene Id :	27301
Human Swiss Prot No :	Q9UBZ4
Mouse Gene Id :	77622
Mouse Swiss Prot No :	Q68G58
Immunogen :	Synthesized peptide derived from human APEX2 AA range: 196-246
Specificity :	This antibody detects endogenous levels of APEX2 at Human/Mouse
Formulation :	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source :	Polyclonal, Rabbit,IgG
Dilution :	WB 1[?]500-2000
Purification :	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Concentration :	1 mg/ml

Storage Stability : -15°C to -25°C/1 year(Do not lower than -25°C)

Molecularweight : 57kD

Background : Apurinic/aprimidinic (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 a protein shown to have a weak class II AP endonuclease activity. Most of the encoded protein is located in the nucleus but some is also present in mitochondria. This protein may play an important role in both nuclear and mitochondrial base excision repair. Alternatively spliced transcript variants encoding multiple isoforms have been observed for this gene. [provided by RefSeq, Nov 2012],

Function : catalytic activity:The C-O-P bond 3' to the apurinic or apyrimidinic site in DNA is broken by a beta-elimination reaction, leaving a 3'-terminal unsaturated sugar and a product with a terminal 5'-phosphate.,function:May participate in both nuclear and mitochondrial post-replicative base excision repair (BER). In the nucleus functions in the PCNA-dependent BER pathway.,similarity:Belongs to the DNA repair enzymes AP/exoA family.,subcellular location:Colocalized partly with PCNA in nuclear foci.,subunit:Interacts with PCNA. This interaction is increased by misincorporation of uracil in nuclear DNA.,tissue specificity:Highly expressed in cells, adult brain and kidney. Weakly expressed in the fetal brain.,

Subcellular Location : Nucleus. Cytoplasm. Mitochondrion . Together with PCNA, is redistributed in discrete nuclear foci in presence of oxidative DNA damaging agents.

Expression : Highly expressed in brain and kidney. Weakly expressed in the fetal brain.

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