



Ape2 (H-250): sc-130106

BACKGROUND

Ape2 (apurinic-apyrimidinic endonuclease 2), also known as APEX nuclease 2 (APEXL2), AP endonuclease XTH2 or DNA-(apurinic or apyrimidinic site) lyase 2, is a member of the AP/exoA family of DNA repair enzymes. Ape2 is ubiquitously expressed and localizes to the nucleus and mitochondria. It is one of the two class II AP endonucleases expressed in mammals (along with Ref-1 (Ape1)). However Ape2 exhibits limited AP-endonuclease activity, and instead primarily functions as a 3'-5' exonuclease and a 3'-phosphodiesterase. Ape2 associates with PCNA (proliferating cell nuclear antigen) and may play a role in base excision repair (BER), eliminating damaged bases in genomic DNA. Growth retardation and G₂/M-phase arrest, exhibited by Ape2-null mice, suggest that Ape2 is also a key player in the proper progression of the cell cycle.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: APEX2 (human) mapping to Xp11.21.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

SOURCE

Ape2 (H-250) is a purified rabbit polyclonal antibody raised against recombinant Ape2 of human origin.

PRODUCT

Each vial contains 100 µg IgG in 1.0 ml PBS with < 0.1% sodium azide, 0.1% gelatin, 10% glycerol, 0.2% BSA and 0.004% thimerosal.

APPLICATIONS

Ape2 (H-250) is recommended for detection of Ape2 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000).

Suitable for use as control antibody for Ape2 siRNA (h): sc-61974, Ape2 shRNA Plasmid (h): sc-61974-SH and Ape2 shRNA (h) Lentiviral Particles: sc-61974-V.

Molecular Weight of Ape2: 60 kDa.

Positive Controls: Ape2 (h): 293T Lysate: sc-172519 or Ape2 (h2): 293T Lysate: sc-172721.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.