



APEX1 Antibody

#24150

Catalog Number: 24150-1, 24150-2

Amount: 50µg/50µl, 100µg/100µl

Swiss-Prot No. : P27695

Form of Antibody: Rabbit IgG in phosphate buffered saline (without Mg²⁺ and Ca²⁺), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.

Storage/Stability: Store at -20°C/1 year

Immunogen: The antiserum was produced against synthesized peptide derived from Human APEX1

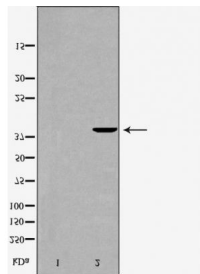
Purification: The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.

Specificity/Sensitivity: APEX1 antibody detects endogenous levels of total APEX1 protein

Reactivity: Human, Mouse, Rat

Applications:

Predicted MW: 36kd WB:1:500~1:2000 IHC:1:50-200



Western blot analysis of extracts of Hela cell and HepG2 cell, using APEX1 antibody.

Background : Ape1 (Apurinic/Apyrimidic Endonuclease 1), also known as Ref1 (Redox effector factor 1), is a multifunctional protein with several biological activities. These include roles in DNA repair and in the cellular response to oxidative stress. Ape1 initiates the repair of abasic sites and is essential for the base excision repair (BER) pathway. Repair activities of Ape1 are stimulated by interaction with XRCC1, another essential protein in BER. Ape1 functions as a redox factor that maintains transcription factors in an active, reduced state but can also function in a redox-independent manner as a transcriptional cofactor to control different cellular fates such as apoptosis, proliferation and differentiation. Increased expression of Ape1 is associated with many types of cancers including cervical, ovarian, prostate, rhabdomyosarcomas and germ cell tumors. Ape1 has been shown to stimulate DNA binding of several transcription factors known to be involved in tumor progression such as Fos, Jun, NF-κB, PAX, HIF-1, HLF and p53. Mutation of the Ape1 gene has also been associated with amyotrophic lateral sclerosis (ALS).