

DESCRIPTION

Species Reactivity	Human/Mouse/Rat
Specificity	Detects human, mouse, and rat APE in Western blots.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant human APE Pro2-Leu318 Accession # P27695
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 µm filtered solution in PBS.

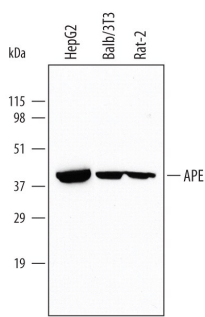
APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

	Recommended Concentration	Sample
Western Blot	1 µg/mL	See Below
Simple Western	10 µg/mL	See Below

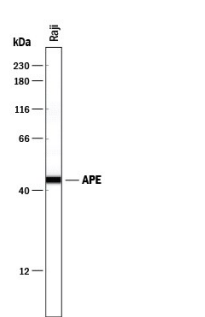
DATA

Western Blot




Detection of Human, Mouse, and Rat APE by Western Blot. Western blot shows lysates of HepG2 human hepatocellular carcinoma cell line, Balb/3T3 mouse embryonic fibroblast cell line, and Rat-2 rat embryonic fibroblast cell line. PVDF membrane was probed with 1 µg/mL of Goat Anti-Human/Mouse/Rat APE Antigen Affinity-purified Polyclonal Antibody (Catalog # AF1044) followed by HRP-conjugated Anti-Goat IgG Secondary Antibody (Catalog # HAF017). A specific band was detected for APE at approximately 40 kDa (as indicated). This experiment was conducted using [Immunoblot Buffer Group 1](#).

Simple Western



Detection of Human APE by Simple Western™. Simple Western lane view shows lysates of Raji human Burkitt's lymphoma cell line, loaded at 0.2 mg/mL. A specific band was detected for APE at approximately 45 kDa (as indicated) using 10 µg/mL of Goat Anti-Human/Mouse/Rat APE Antigen Affinity-purified Polyclonal Antibody (Catalog # AF1044) followed by 1:50 dilution of HRP-conjugated Anti-Goat IgG Secondary Antibody (Catalog # HAF109). This experiment was conducted under reducing conditions and using the 12-230 kDa separation system.



PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.2 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

Human APE (also known as Ref-1) is the apurinic/apyrimidinic (AP) endonuclease required for efficient DNA base excision repair (BER). Following the removal of a damaged base by a DNA glycosylase, APE cleaves the AP site to allow resynthesis and ligation to complete repair. In addition, APE/Ref-1 acts as a factor that regulates the redox state of multiple transcription factors, including c-Jun, c-Fos, NF-κB, and p53.