

**DATASHEET**

**APE1 Mouse Monoclonal Antibody(C2519)**

CAT. NO. AMA02131

**KEY FEATURES**

Target	APE1	Source / Host	Mouse
Reactivity	Human, Rat, Monkey	Clonality	Monoclonal
Applications	WB, IHC, FC	Conjugation	Unconjugated
Form / Buffer	Mouse IgG1. Liquid in PBS, pH 7.3, 30% glycerol, and 0.01% sodium azide.	Storage	at-20°C

**BACKGROUND**

Multifunctional protein that plays a central role in the cellular response to oxidative stress. The two major activities of APE1 are DNA repair and redox regulation of transcriptional factors. Functions as an apurinic/aprimidinic (AP) endodeoxyribonuclease in the base excision repair (BER) pathway of DNA lesions induced by oxidative and alkylating agents. Initiates repair of AP sites in DNA by catalyzing hydrolytic incision of the phosphodiester backbone immediately adjacent to the damage, generating a single-strand break with 5'-deoxyribose phosphate and 3'-hydroxyl ends. Also incises at AP sites in the DNA strand of DNA/RNA hybrids, single-stranded DNA regions of R-loop structures, and single-stranded RNA molecules.

**APPLICATION**

To ensure optimal assay performance, AREX recommends conducting reagent titration tailored to each testing system for optimal detection results.

WB	1:500 - 1:1000
IHC	1:100 - 1:500
FC	1:100 - 1:200

\*Results are sample-specific. Please refer to your local assay conditions and test parameters for reference.

**PRODUCT OVERVIEW**

Description	Mouse monoclonal to APE1
Specificity	Recognizes endogenous levels of APE1 protein
Antibody Type	Primary antibody
Immunogen	Recombinant fusion protein of human APE1 expressed in E. Coli
Purification	This antibody is purified through a protein G column.
Molecular Weight	Predicted: 36 kD; Observed: 36 kD
Form/Buffer	Mouse IgG1. Liquid in PBS, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Alternative Names	APE; APE1; APEX; APX; HAP1; REF1; DNA-(apurinIC, or apyrimidinIC, site) lyase; APEX nuclease; APEN; ApurinIC,-apyrimidinIC, endonuclease 1; AP endonuclease 1; APE-1; REF-1; Redox factor-1
Gene Symbol	APEX1
Entrez Gene	328(Human); 79116(Rat)
SwissProt	P27695(Human); P43138(Rat)

\*AREX continuously optimizes our products. Webpage content may not reflect the latest updates. For inquiries, please contact [info@arexbio.com](mailto:info@arexbio.com) or your local distributor.

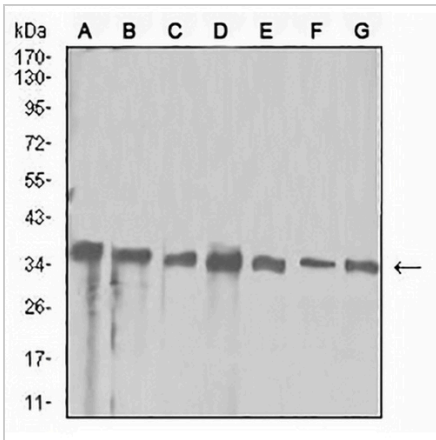
\*Clone Number, Reactivity, Source/Host and Clonality can be found in the product name and Key Features section above.

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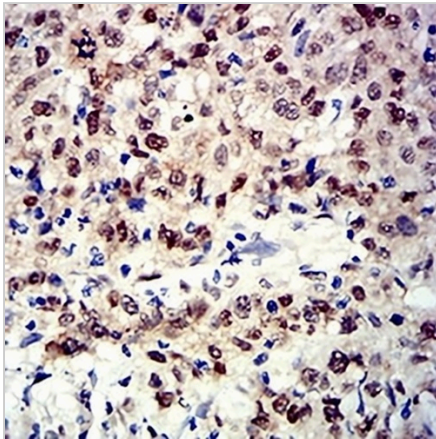
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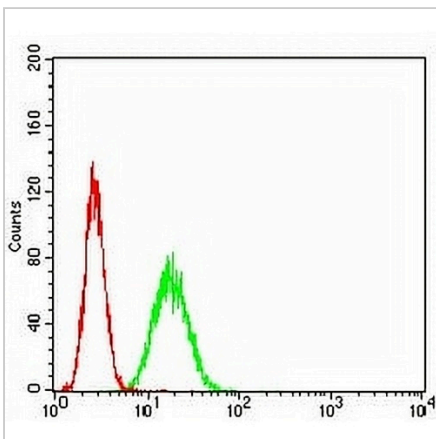
**DATA**



Western blot analysis of APE1 expression in HeLa (A), Jurkat (B), SW480 (C), A431 (D), HepG2 (E), NIH/3T3 (F), PC12 (G) whole cell lysates. (Predicted band size: 36 kD; Observed band size: 36 kD)



Immunohistochemical analysis of APE1 staining in human breast cancer formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.



Flow cytometric analysis of HeLa cells using Anti-APE1 Antibody (green) and negative control (red).

**STORAGE**

Store at 4°C short term. For long term storage, store at -20°C, avoiding freeze/thaw cycles.

**NOTE**

For Research Use Only. Not for diagnostic, therapeutics, prophylactic or in vivo use.