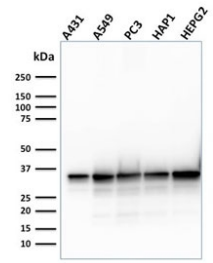
APE1 Antibody / APEX1 [clone CPTC-APEX1-2] (V7287)

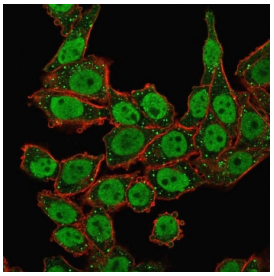
Catalog No.	Formulation	Size
V7287-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V7287-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V7287SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug
V7287IHC-7ML	Prediluted in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide; *For IHC use only*	7 ml

Bulk quote request

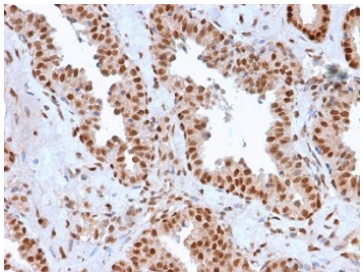
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG1, kappa
Clone Name	CPTC-APEX1-2
Purity	Protein G affinity chromatography
UniProt	P27695
Localization	Nuclear, cytoplasmic (mitochondria)
Applications	Flow Cytometry : 1-2ug/10^6 cells Immunofluorescence : 1-2ug/ml Western Blot : 1-2ug/ml Immunohistochemistry (FFPE) : 0.5-1ug/ml for 30 min at RT
Limitations	This APE1 antibody is available for research use only.



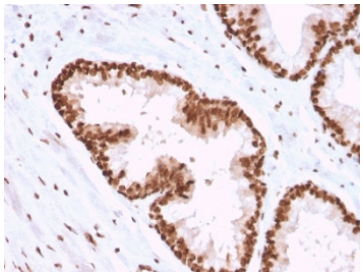
Western blot testing of human cell lysates with APE1 antibody (clone CPTC-APEX1-2). Predicted molecular weight ~38 kDa.



Immunofluorescent staining of human permeabilized HeLa cells with APE1 antibody (clone CPTC-APEX1-2). Green = APE1 antibody + secondary, Red = Phalloidin.



IHC testing of FFPE human prostate carcinoma with APE1 antibody (clone CPTC-APEX1-2). Required HIER: steam section in pH6 citrate buffer for 20 min and allow to cool prior to staining.



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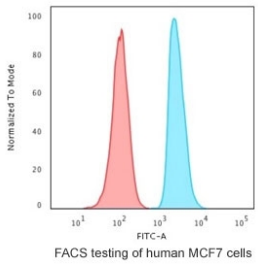
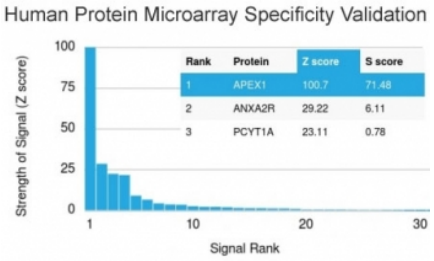
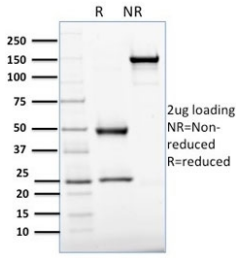


FACS testing of human MCF7 cells

Intracellular FACS staining of human MCF7 cells with APE1 antibody (blue) and isotype control (red).



Analysis of HuProt(TM) microarray containing more than 19,000 full-length human proteins using APE1 antibody (clone CPTC-APEX1-2). These results demonstrate the foremost specificity of the CPTC-APEX1-2 mAb.
Z- and S- score: The Z-score represents the strength of a signal that an antibody (in combination with a fluorescently-tagged anti-IgG secondary Ab) produces when binding to a particular protein on the HuProt(TM) array. Z-scores are described in units of standard deviations (SD's) above the mean value of all signals generated on that array. If the targets on the HuProt(TM) are arranged in descending order of the Z-score, the S-score is the difference (also in units of SD's) between the Z-scores. The S-score therefore represents the relative target specificity of an Ab to its intended target.



SDS-PAGE analysis of purified, BSA-free APE1 antibody (clone CPTC-APEX1-2) as confirmation of integrity and purity.

Description

APEX / APE1 is a multifunctional protein that plays a central role in the cellular response to oxidative stress. The two major activities of APEX1 in DNA repair and redox regulation of transcriptional factors. Functions as a apurinic/apyrimidinic (AP) endodeoxyribonuclease in the DNA base excision repair (BER) pathway of DNA lesions induced by oxidative and alkylating agents. Patients with genetic variants in APEX1 and XRCC1 have been shown to have a higher risk of lung cancer. Elevated APEX1 levels observed in human testicular cancer may be related to relative resistance to therapy and therefore may serve as a diagnostic marker for refractory disease.

Application Notes

Optimal dilution of the APE1 antibody to be determined by the researcher.

1. The prediluted format is supplied in a dropper bottle and is optimized for use in IHC. After epitope retrieval step (if required), drip mAb solution onto the tissue section and incubate at RT for 30 min.

Immunogen

Recombinant full-length human protein was used as the immunogen for the APE1 antibody.

Storage

Store the APE1 antibody at 2-8oC (with azide) or aliquot and store at -20oC or colder (without azide).