APEX Nuclease I Antibody

Mouse Monoclonal Antibody [Clone CPTC-APEX1-2]

Catalog No	Format	Size
328-MSM1-P0	Purified Ab with BSA and Azide at 200ug/ml	20 ug
328-MSM1-P1	Purified Ab with BSA and Azide at 200ug/ml	100 ug
328-MSM1-P1ABX	Purified Ab WITHOUT BSA and Azide at 1.0mg/ml	100 ug

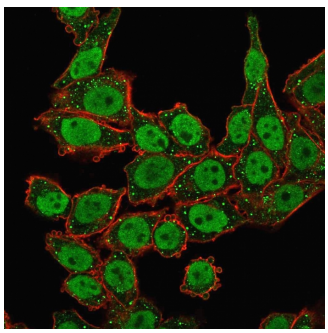
Applications	Tested Dillution	Note
Flow Cytometry (Flow)	1-2ug/million cells	
Immunofluorescence (IF)	1-3ug/ml	
Immunohistochemistry (IHC)	1-2ug/ml	30 min at RT. Staining of formalin-fixed tissues requires heating tissue sections in 10mM Tris with 1mM EDTA, pH 9.0, for 45 min at 95°C followed by cooling at RT for 20 minutes
Western Blot (WB)	2-4ug/ml	

Product Details

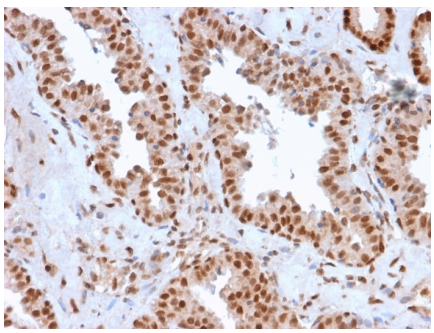
Clone	CPTC-APEX1-2
Gene Name	APEX1
Immunogen	Recombinant human full-length APEX1 protein
Host	Mouse
Clonality	Monoclonal
Isotype / Light Chain	IgG1 / Kappa
Mol. Weight of Antigen	35kDa
Cellular Localization	Cytoplasm, Endoplasmic reticulum, Mitochondrion, Nucleolus, Nucleus, Nucleus speckle
Species Reactivity	Human
Positive Control	A431, A549, HAP1, HeLa, HePG2, MCF-7, NIH/3T3 and C6 whole cell lysates. Human ovarian carcinoma., PC3

**Optimal dilution for a specific application should be determined.*

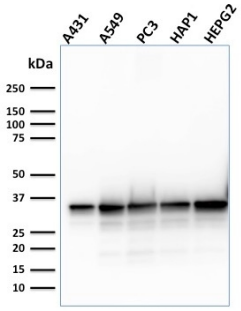
Product Images for APEX Nuclease I Antibody



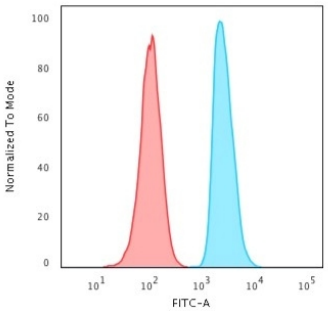
Immunofluorescence Analysis of human HeLa cells labeling APEX Nuclease I with APEX Nuclease I Mouse Monoclonal Antibody (CPTC-APEX1-2) followed by Goat anti-Mouse IgG-CF488 (Green). Phalloidin CF640 stains the membrane red.



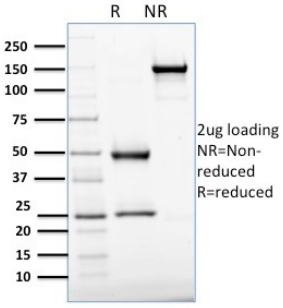
Formalin-fixed, paraffin-embedded human Prostate Carcinoma stained with APEX Nuclease I Mouse Monoclonal Antibody (CPTC-APEX1-2).



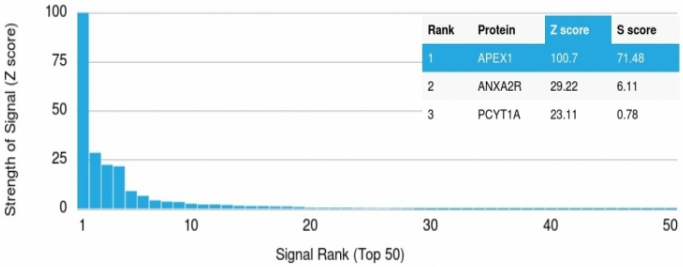
Western Blot Analysis of Human A431, A549, PC3, HAP1, HePG2, cell lysate using APEX Nuclease I Mouse Monoclonal Antibody (CPTC-APEX1-2).



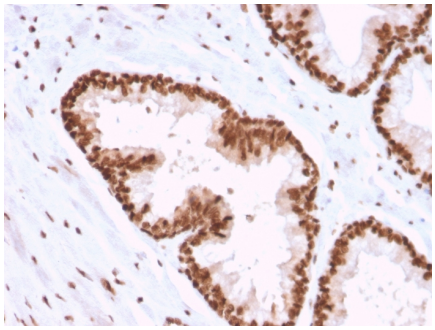
Flow Cytometric Analysis of HeLa cells using APEX Nuclease I Mouse Monoclonal Antibody (CPTC-APEX1-2). Goat anti-Mouse IgG-CF488 (Blue); Isotype Control (Red).



SDS-PAGE Analysis Purified APEX Nuclease I Mouse Monoclonal Antibody (CPTC-APEX1-2). Confirmation of Purity and Integrity of Antibody.



Analysis of Protein Array containing more than 19,000 full-length human proteinsusing APEX Nuclease I Mouse Monoclonal Antibody (CPTC-APEX1-2). Z- and S- Score: The Z-score represents the strength of a signal that a monoclonal antibody (MAb) (in combination with a fluorescently-tagged anti-IgG secondary antibody) produces when binding to a particular protein on the HuProtTM array. Z-scores are described in units of standard deviations (SD?s) above the mean value of all signals generated on that array. If targets on HuProtTM are arranged in descending order of the Z-score, the S-score is the difference (also in units of SD?s) between the Z-score. S-score therefore represents the relative target specificity of a MAb to its intended target. A MAb is considered to specific to its intended target, if the MAb has an S-score of at least 2.5. For example, if a MAb binds to protein X with a Z-score of 43 and to protein Y with a Z-score of 14, then the S-score for the binding of that MAb to protein X is equal to 29.



Formalin-fixed, paraffin-embedded human Prostate Carcinoma stained with APEX Nuclease I Mouse Monoclonal Antibody (CPTC-APEX1-2).

Specificity & Comments

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.

Supplied As

200ug/ml of Ab Purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0mg/ml.

Storage and Stability

Antibody with azide - store at 2 to 8°C. Antibody without azide - store at -20 to -80°C. Antibody is stable for 24 months. Non-hazardous. No MSDS required.

Research Areas

Neuroscience, Nuclear Marker

Limitations and Warranty

This antibody is available for research use only and is not approved for use in diagnosis.There are no warranties, expressed or implied, which extend beyond this description. Company is not liable for any personal injury or economic loss resulting from this product.