

## Product datasheet for **TA800333M**

### **APE1 (APEX1) Mouse Monoclonal Antibody [Clone ID: OTI2A4]**

#### **Product data:**

Product Type:	Primary Antibodies
Clone Name:	OTI2A4
Applications:	FC, IF, IHC, WB
Recommended Dilution:	WB 1:2000, IHC 1:150, IF 1:100, FLOW 1:100
Reactivity:	Human, Mouse, Rat
Host:	Mouse
Isotype:	IgG2a
Clonality:	Monoclonal
Immunogen:	Human recombinant protein fragment corresponding to amino acids 1-242 of human APEX1 (NP_001632) produced in E.coli.
Formulation:	PBS (pH 7.3) containing 1% BSA, 50% glycerol and 0.02% sodium azide.
Concentration:	1 mg/ml
Purification:	Purified from mouse ascites fluids or tissue culture supernatant by affinity chromatography (protein A/G)
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Predicted Protein Size:	35.4 kDa
Gene Name:	apurinic/aprimidinic endodeoxyribonuclease 1
Database Link:	<a href="#">NP_001632</a> <a href="#">Entrez Gene 11792 Mouse</a> <a href="#">Entrez Gene 79116 Rat</a> <a href="#">Entrez Gene 328 Human</a> <a href="#">P27695</a>



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**Background:**

Apurinic/apryrimidinic (AP) sites occur frequently in DNA molecules by spontaneous hydrolysis, by DNA damaging agents or by DNA glycosylases that remove specific abnormal bases. AP sites are pre-mutagenic lesions that can prevent normal DNA replication so the cell contains systems to identify and repair such sites. Class II AP endonucleases cleave the phosphodiester backbone 5' to the AP site. This gene encodes the major AP endonuclease in human cells. Splice variants have been found for this gene; all encode the same protein. [provided by RefSeq]

**Synonyms:**

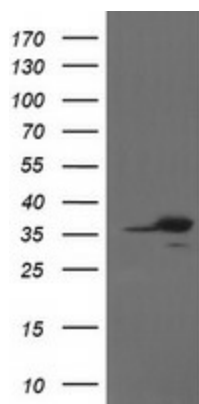
APE; APE1; APEN; APEX; APX; HAP1; REF1

**Protein Families:**

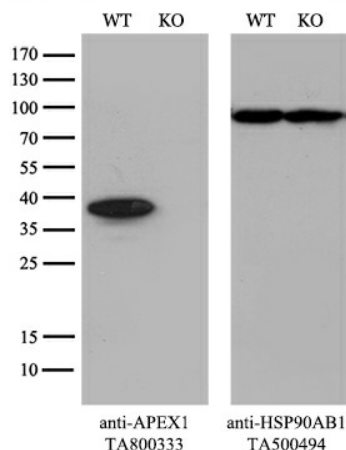
Druggable Genome, Stem cell - Pluripotency, Transcription Factors

**Protein Pathways:**

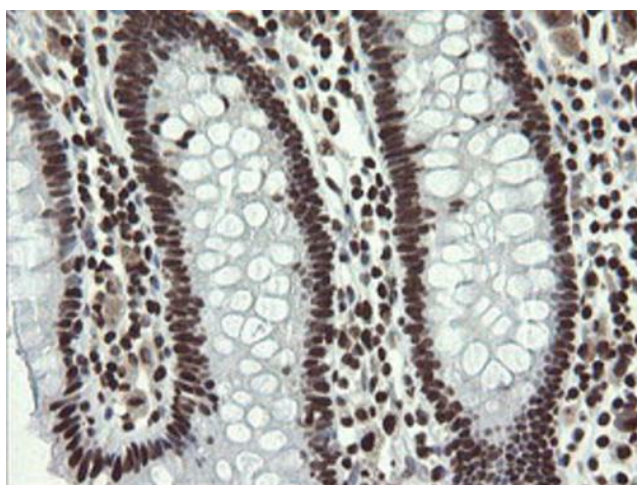
Base excision repair

**Product images:**


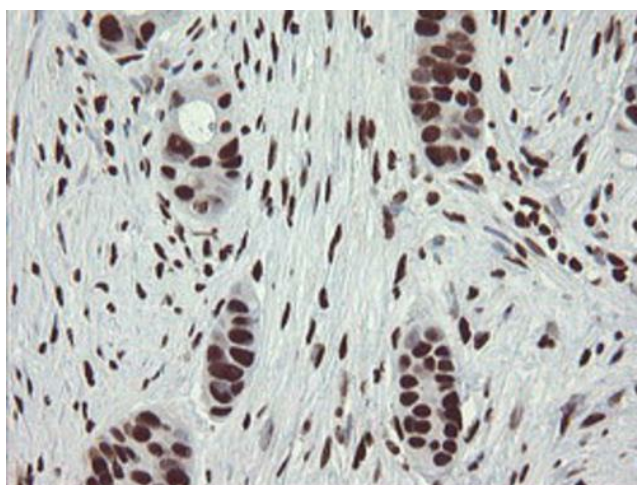
HEK293T cells were transfected with the pCMV6-ENTRY control (Left lane) or pCMV6-ENTRY APEX1 [RC201732], Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-APEX1. Positive lysates [LY400618] (100ug) and [LC400618] (20ug) can be purchased separately from OriGene.



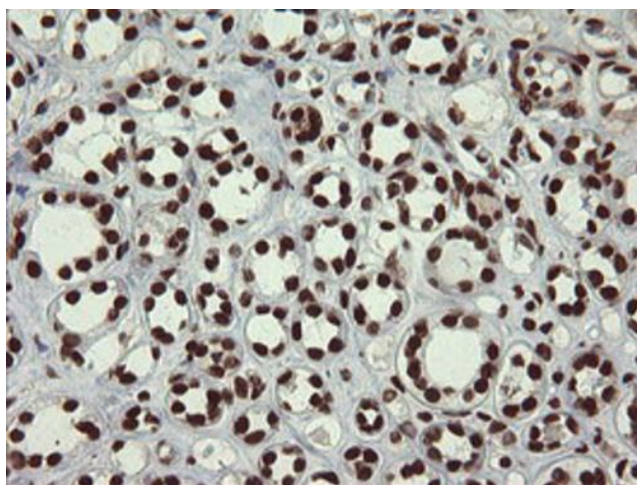
Equivalent amounts of cell lysates (10 ug per lane) of wild-type 293T cells (WT, Cat# LC810293T) and APEX1-Knockout 293T cells (KO, Cat# [LC811481]) were separated by SDS-PAGE and immunoblotted with anti-APEX1 monoclonal antibody [TA800333], (1:500). Then the blotted membrane was stripped and reprobed with anti-HSP90AB1 antibody ([TA500494]) as a loading control.



Immunohistochemical staining of paraffin-embedded Human colon tissue within the normal limits using anti-APEX1 mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.

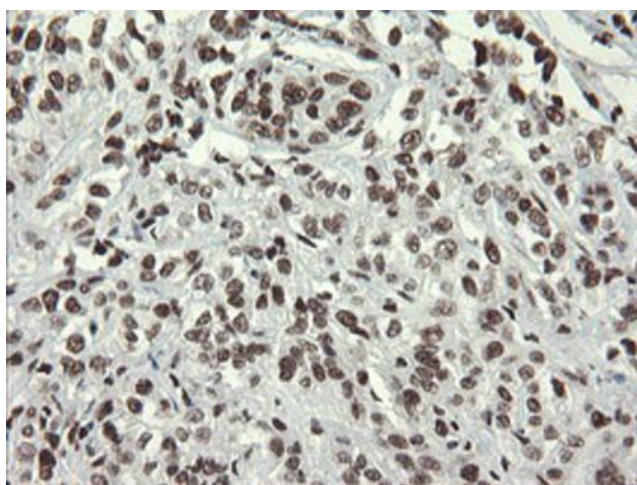


Immunohistochemical staining of paraffin-embedded Adenocarcinoma of Human colon tissue using anti-APEX1 mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.

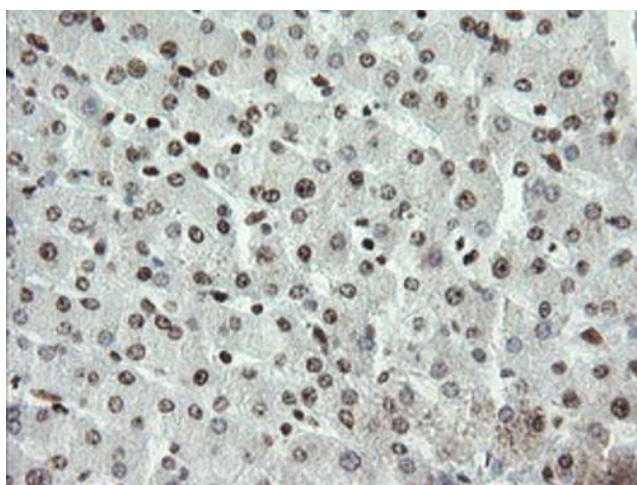


Immunohistochemical staining of paraffin-embedded Human Kidney tissue within the normal limits using anti-APEX1 mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.

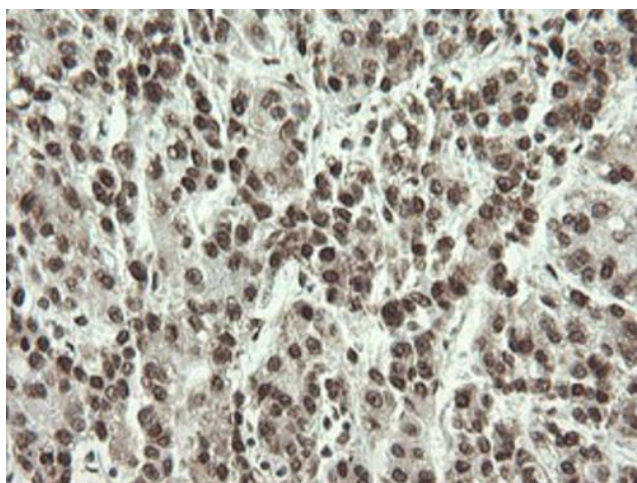




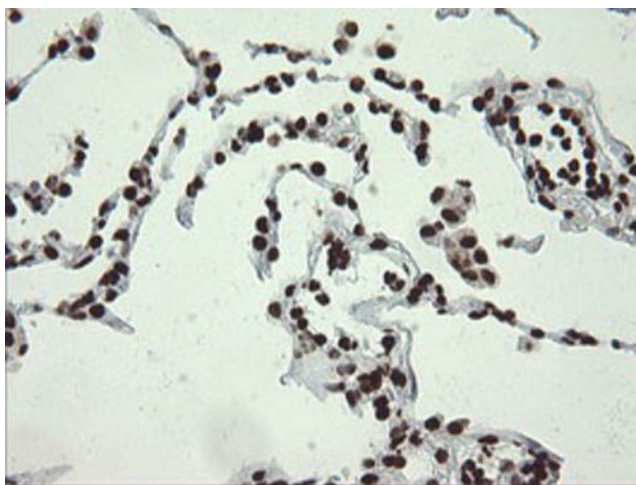
Immunohistochemical staining of paraffin-embedded Carcinoma of Human kidney tissue using anti-APEX1 mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.



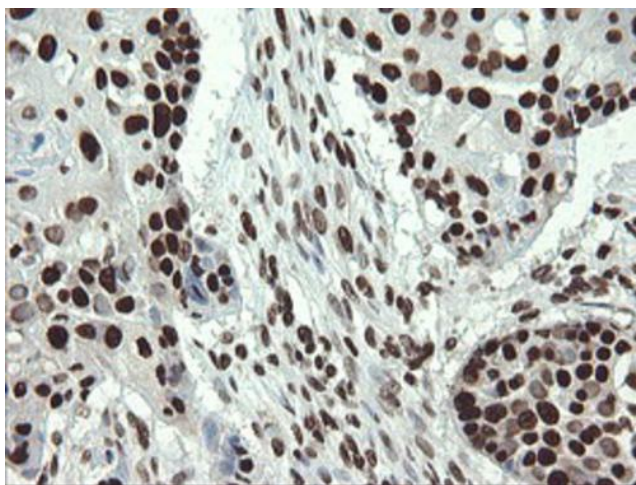
Immunohistochemical staining of paraffin-embedded Human liver tissue within the normal limits using anti-APEX1 mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.



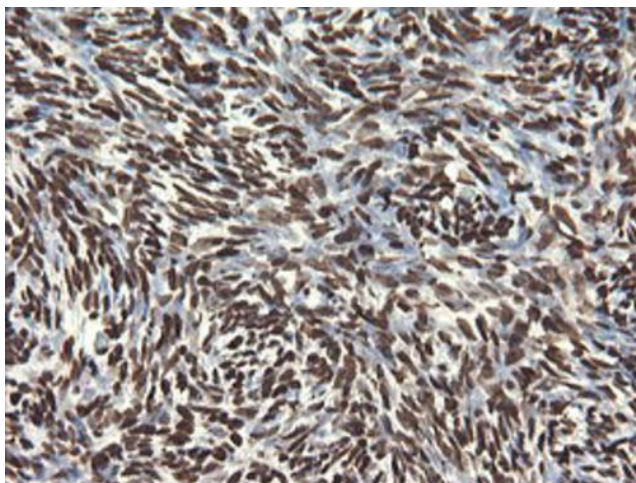
Immunohistochemical staining of paraffin-embedded Carcinoma of Human liver tissue using anti-APEX1 mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.



Immunohistochemical staining of paraffin-embedded Human lung tissue within the normal limits using anti-APEX1 mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.

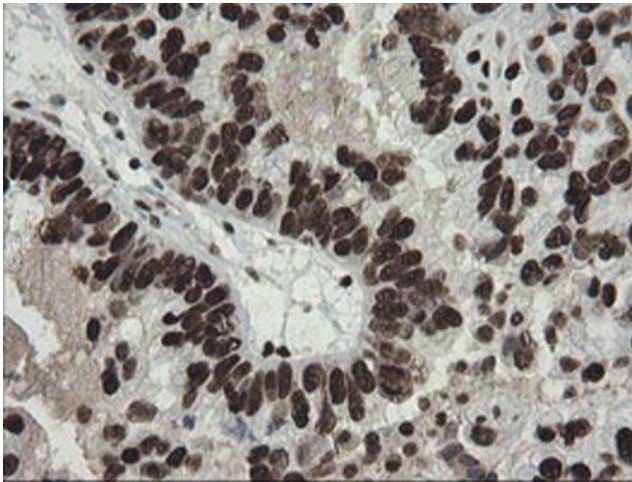


Immunohistochemical staining of paraffin-embedded Carcinoma of Human lung tissue using anti-APEX1 mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.

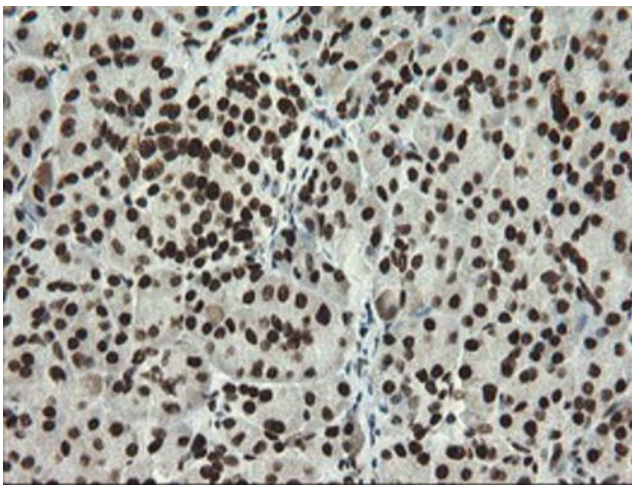


Immunohistochemical staining of paraffin-embedded Human Ovary tissue within the normal limits using anti-APEX1 mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.

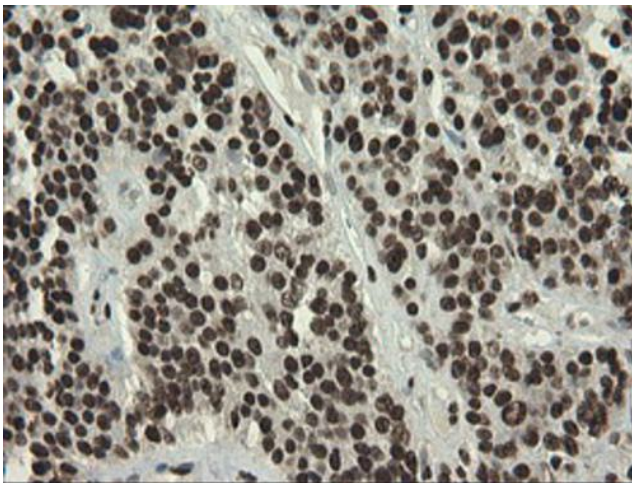




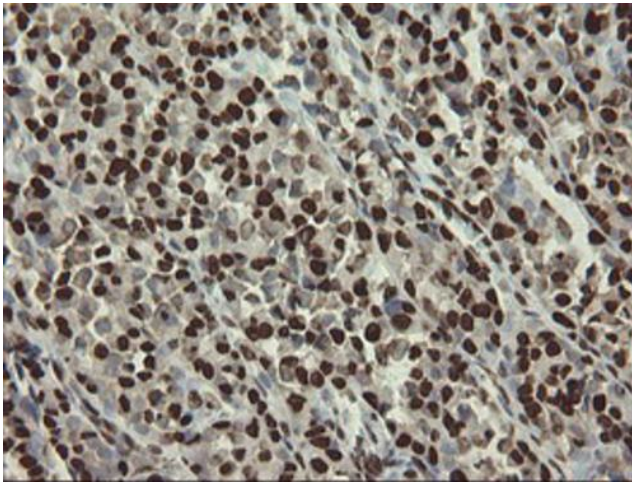
Immunohistochemical staining of paraffin-embedded Adenocarcinoma of Human ovary tissue using anti-APEX1 mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.



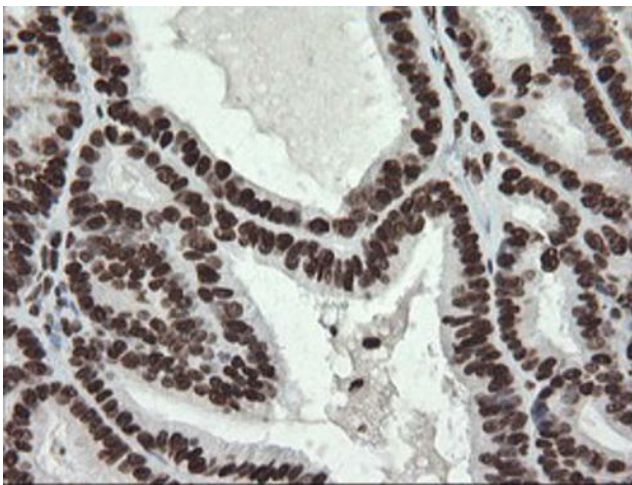
Immunohistochemical staining of paraffin-embedded Human pancreas tissue within the normal limits using anti-APEX1 mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.



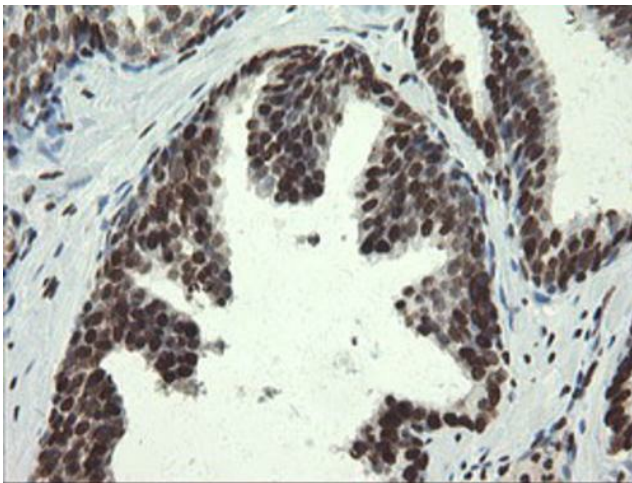
Immunohistochemical staining of paraffin-embedded Carcinoma of Human pancreas tissue using anti-APEX1 mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.



Immunohistochemical staining of paraffin-embedded Carcinoma of Human thyroid tissue using anti-APEX1 mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.

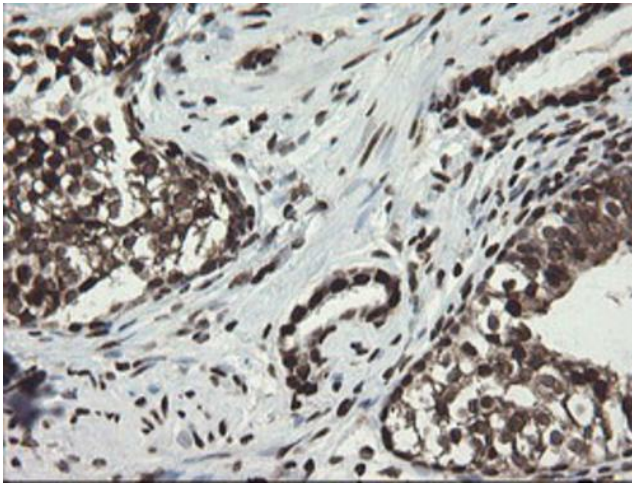


Immunohistochemical staining of paraffin-embedded Adenocarcinoma of Human endometrium tissue using anti-APEX1 mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.

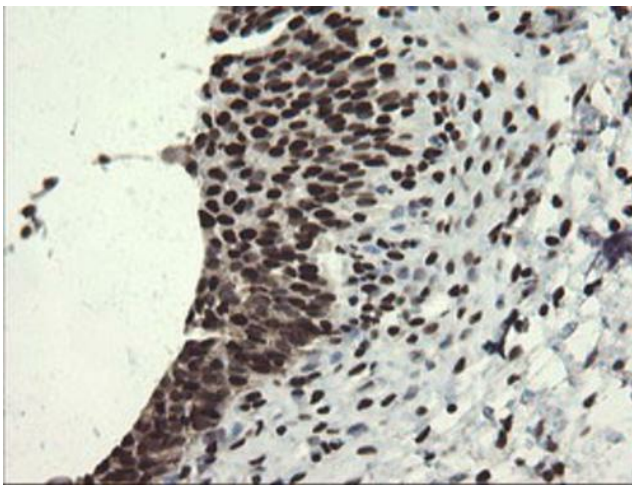


Immunohistochemical staining of paraffin-embedded Human prostate tissue within the normal limits using anti-APEX1 mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.

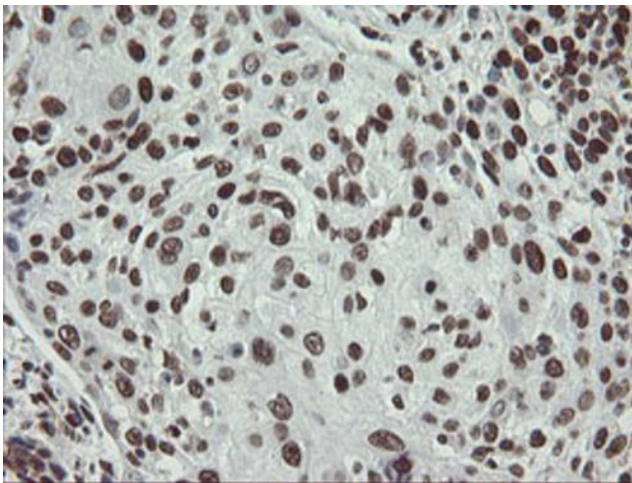




Immunohistochemical staining of paraffin-embedded Carcinoma of Human prostate tissue using anti-APEX1 mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.

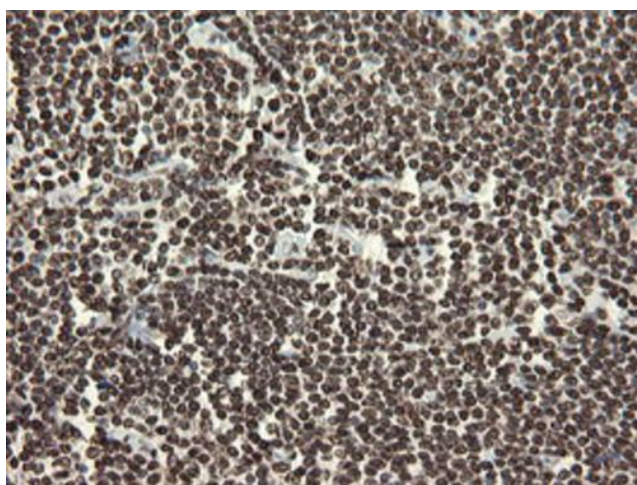


Immunohistochemical staining of paraffin-embedded Human bladder tissue within the normal limits using anti-APEX1 mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.

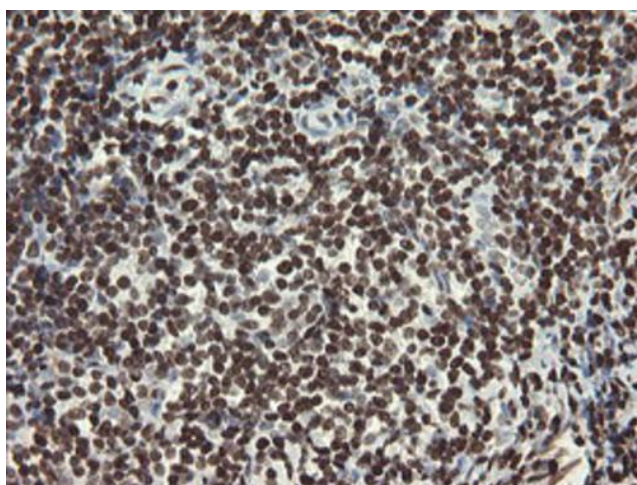


Immunohistochemical staining of paraffin-embedded Carcinoma of Human bladder tissue using anti-APEX1 mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.

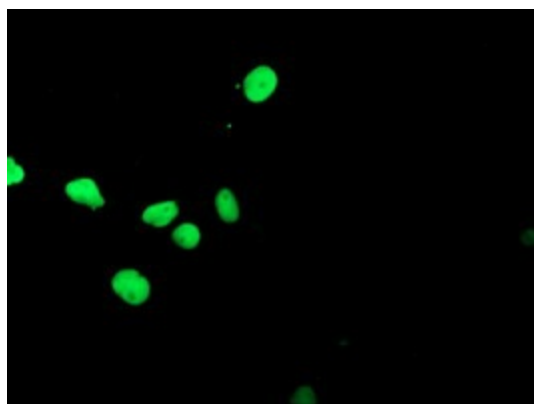




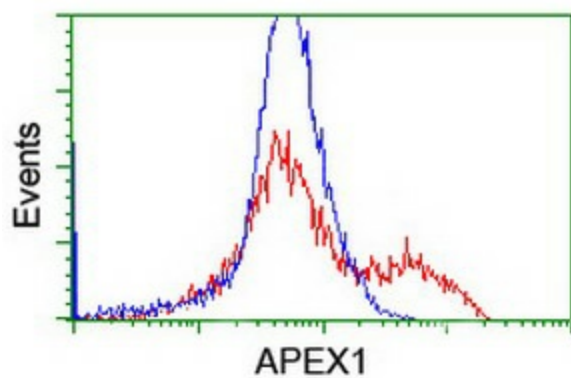
Immunohistochemical staining of paraffin-embedded Human lymphoma tissue using anti-APEX1 mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.



Immunohistochemical staining of paraffin-embedded Human tonsil within the normal limits using anti-APEX1 mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.



Anti-APEX1 mouse monoclonal antibody ([TA800333]) immunofluorescent staining of COS7 cells transiently transfected by pCMV6-ENTRY APEX1 ([RC201732]).



HEK293T cells transfected with either [RC201732] overexpress plasmid (Red) or empty vector control plasmid (Blue) were immunostained by anti-APEX1 antibody ([TA800333]), and then analyzed by flow cytometry.