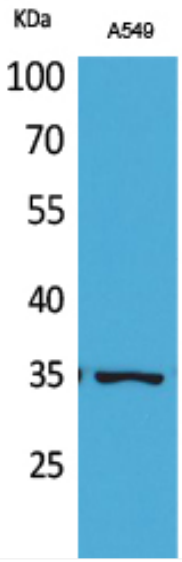
Ref-1 (Acetyl Lys6) Polyclonal Antibody

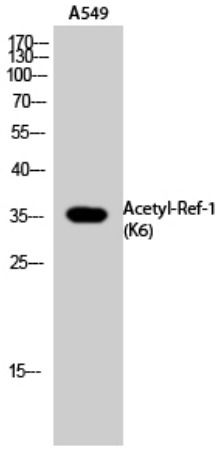
Catalog No	BYab-00849
Isotype	IgG
Reactivity	Human;Rat;Mouse;
Applications	WB;IHC;IF;ELISA
Gene Name	APEX1
Protein Name	DNA-(apurinic or apyrimidinic site) lyase
Immunogen	The antiserum was produced against synthesized Acetyl-peptide derived from human APE1 around the Acetylation site of Lys6. AA range:1-50
Specificity	Acetyl-Ref-1 (K6) Polyclonal Antibody detects endogenous levels of Ref-1 protein only when acetylated at K6.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Polyclonal, Rabbit,IgG
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	WB: 1/500 - 1/2000. IHC-p: 1:100-300 ELISA: 1/20000.. IF 1:50-200
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	APEX1; 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
Observed Band	35kD
Cell Pathway	Nucleus. Nucleus, nucleolus. Nucleus speckle. Endoplasmic reticulum. Cytoplasm. Detected in the cytoplasm of B-cells stimulated to switch (By similarity). Colocalized with SIRT1 in the nucleus. Colocalized with YBX1 in nuclear speckles after genotoxic stress. Together with OGG1 is recruited to nuclear speckles in UVA-irradiated cells. Colocalized with nucleolin and NPM1 in the nucleolus. Its nucleolar localization is cell cycle dependent and requires active rRNA transcription. Colocalized with calreticulin in the endoplasmic reticulum. Translocation from the nucleus to the cytoplasm is stimulated in presence of nitric oxide (NO) and function in a CRM1-dependent manner, possibly as a consequence of demasking a nuclear export signal (amino acid position 64-80). S-nitrosylation at Cys-93 and
Tissue Specificity	Brain,Embryonic stem cells,Lung,Melanocyte,Placenta,Skin,

Function	catalytic activity:The C-O-P bond 3' to the apurinic or apyrimidinic site in DNA is broken by a beta-elimination reaction, leaving a 3'-terminal unsaturated sugar and a product with a terminal 5'-phosphate.,function:Repairs oxidative DNA damages in vitro. May have a role in protection against cell lethality and suppression of mutations. Removes the blocking groups from the 3'-termini of the DNA strand breaks generated by ionizing radiations and bleomycin.,similarity:Belongs to the DNA repair enzymes AP/exoA family.,subunit:Monomer. Component of the SET complex, which also contains SET, ANP32A, HMGB2 and NME1.,
Background	Apurinic/apyrimidinic (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, Jul 2008],
matters needing attention	Avoid repeated freezing and thawing!
Usage suggestions	This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

Products Images



Western Blot analysis of A549 cells using Acetyl-Ref-1 (K6) Polyclonal Antibody. Secondary antibody(catalog#:RS0002) was diluted at 1:20000



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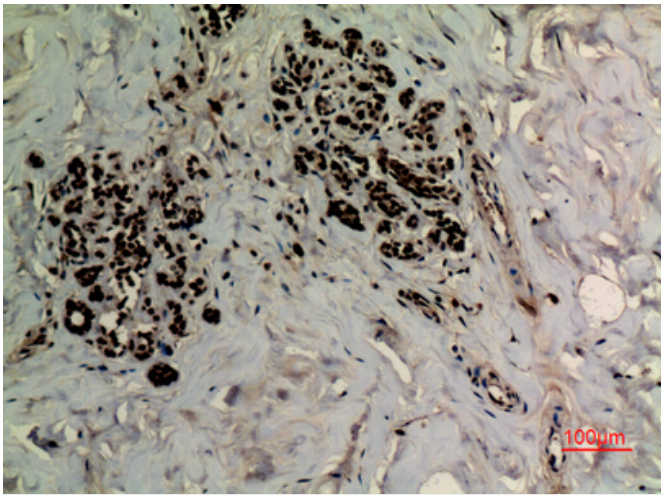
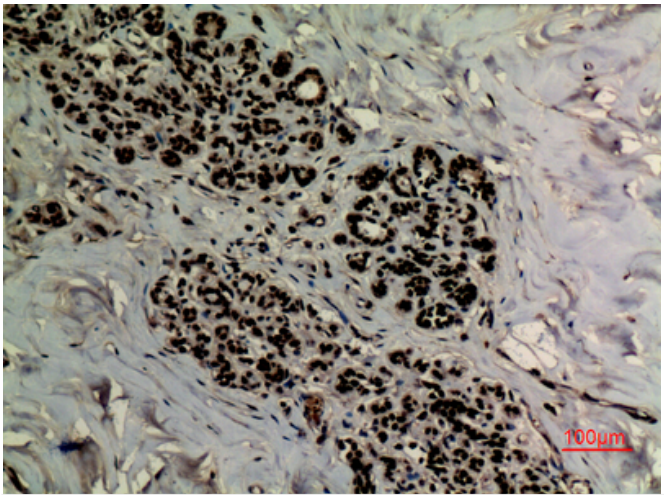


Immunohistochemical analysis of paraffin-embedded human-breast, antibody was diluted at 1:100



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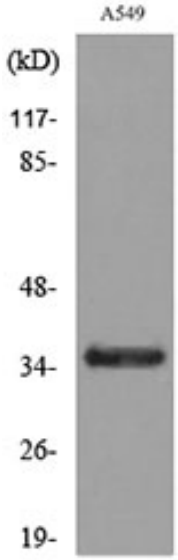

Western blot analysis of lysate from A549 cells, using APE1 (Acetyl-Lys6) Antibody.