

Ref-1 (Acetyl Lys6) Polyclonal Antibody

Catalog No: YK0022

Reactivity: Human; Rat; Mouse;

Applications: WB;IHC;IF;ELISA

Target: Ref-1

Fields: >>Base excision repair

Gene Name: APEX1

Protein Name : DNA-(apurinic or apyrimidinic site) lyase

P27695

P28352

Human Gene Id: 328

Human Swiss Prot

No:

Mouse Swiss Prot

No:

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

Dilution : WB 1:500 - 1:2000. IHC: 1:100-300 ELISA: 1:20000.. IF 1:50-200

Purification: The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

Concentration: 1 mg/ml

Storage Stability: -15°C to -25°C/1 year(Do not lower than -25°C)

1/4



35kD Observed Band:

Cell Pathway: Base excision repair;

Apurinic/apyrimidinic (AP) sites occur frequently in DNA molecules by **Background:**

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],

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...

Subcellular Location:

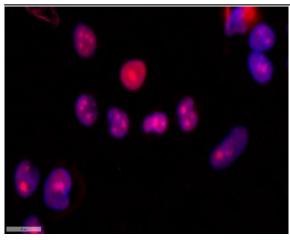
Nucleus. Nucleus, nucleolus. Nucleus speckle. Endoplasmic reticulum. Cytoplasm. Detected in the cytoplasm of B-cells stimulated to switch (By similarity). Colocalized with SIRT1 in the nucleus. Colocalized with YBX1 in nuclear speckles after genotoxic stress. Together with OGG1 is recruited to nuclear 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-

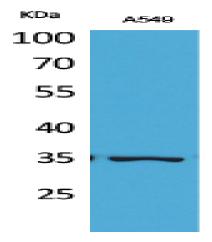
nitrosylation at Cys-93 and

Brain, Embryonic stem cells, Lung, Melanocyte, Placenta, Skin, **Expression:**

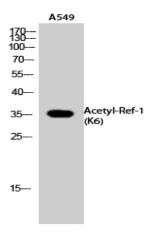
Products Images



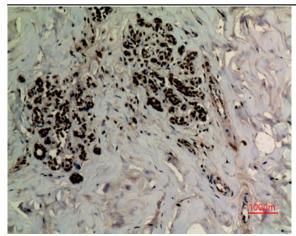
Immunofluorescence analysis of Siha cell. 1,primary Antibody was diluted at 1:100(4°C overnight). 2, Goat Anti Rabbit IgG (H&L) - AFluor 594 Secondary antibody(catalog No: RS3611) was diluted at 1:500(room temperature, 50min).



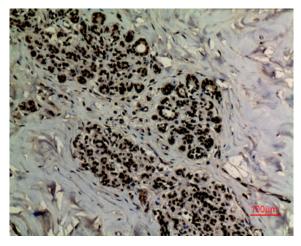
Western Blot analysis of A549 cells using Acetyl-Ref-1 (K6) Polyclonal Antibody. Secondary antibody(catalog#:RS0002) was diluted at 1:20000



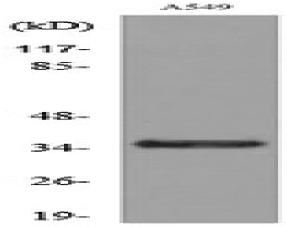
Western Blot analysis of A549 cells using Acetyl-Ref-1 (K6) Polyclonal Antibody. Secondary antibody(catalog#:RS0002) was diluted at 1:20000



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



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



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