

# Immunotag™ Ref-1 (Acetyl Lys7) Polyclonal Antibody

| Antibody Specification |                                                                                                                                                                                                |
|------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Catalog No.            | ITK0023                                                                                                                                                                                        |
| Product Description    | Immunotag™ Ref-1 (Acetyl Lys7) Polyclonal Antibody                                                                                                                                             |
| Size                   | 50 µg, 100 µg                                                                                                                                                                                  |
| Conjugation            | HRP, Biotin, FITC, Alexa Fluor® 350, Alexa Fluor® 405, Alexa Fluor® 488, Alexa Fluor® 555, Alexa Fluor® 594, Alexa Fluor® 647                                                                  |
| IMPORTANT NOTE         | This product is custom manufactured with a lead time of 3-4 weeks. Once in production, this item cannot be cancelled from an order and is not eligible for return.                             |
| Target Protein         | Ref-1 (Lys7)                                                                                                                                                                                   |
| Clonality              | Polyclonal                                                                                                                                                                                     |
| Storage/Stability      | -20°C/1 year                                                                                                                                                                                   |
| Application            | WB,ELISA                                                                                                                                                                                       |
| Recommended Dilution   | Western Blot: 1/500 - 1/2000. ELISA: 1/20000. Not yet tested in other applications.                                                                                                            |
| Concentration          | 1 mg/ml                                                                                                                                                                                        |
| Reactive Species       | Human                                                                                                                                                                                          |
| Host Species           | Rabbit                                                                                                                                                                                         |
| Immunogen              | The antiserum was produced against synthesized Acetyl-peptide derived from human APE1 around the Acetylation site of Lys7. AA range:1-50                                                       |
| Specificity            | Acetyl-Ref-1 (K7) Polyclonal Antibody detects endogenous levels of Ref-1 protein only when acetylated at K7.                                                                                   |
| Purification           | The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen                                                                           |
| Form                   | Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.                                                                                                                        |
| Gene Name              | APEX1                                                                                                                                                                                          |
| Accession No.          | P27695 P28352                                                                                                                                                                                  |
| Alternate Names        | 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 |

## Antibody Specification

|                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
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| Description                 | apurinic/apyrimidinic endodeoxyribonuclease 1(APEX1) Homo sapiens<br>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], |
| Cell Pathway/<br>Category   | Base excision repair,                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Protein<br>Expression       | Brain,Embryonic stem cells,Lung,Melanocyte,Placenta,Skin,                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Subcellular<br>Localization | nuclear chromosome, telomeric region,intracellular,nucleus,nucleoplasm,transcription factor complex,nucleolus,cytoplasm,mitochondrion,endoplasmic reticulum,centrosome,ribosome,nuclear speck,per                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Protein 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.,                |
| Usage                       | For Research Use Only! Not for diagnostic or therapeutic procedures.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |