

## Immunotag™ NEIL2 Polyclonal Antibody

| Antibody Specification |                                                                                                                                                                                                                                                                                                                                                                                                            |
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| Catalog No.            | ITN0700                                                                                                                                                                                                                                                                                                                                                                                                    |
| Product Description    | Immunotag™ NEIL2 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         | NEIL2                                                                                                                                                                                                                                                                                                                                                                                                      |
| Clonality              | Polyclonal                                                                                                                                                                                                                                                                                                                                                                                                 |
| Storage/Stability      | -20°C/1 year                                                                                                                                                                                                                                                                                                                                                                                               |
| Application            | WB,ELISA                                                                                                                                                                                                                                                                                                                                                                                                   |
| Recommended Dilution   | WB 1:500-2000 ELISA 1:5000-20000                                                                                                                                                                                                                                                                                                                                                                           |
| Concentration          | 1 mg/ml                                                                                                                                                                                                                                                                                                                                                                                                    |
| Reactive Species       | Human,Mouse                                                                                                                                                                                                                                                                                                                                                                                                |
| Host Species           | Rabbit                                                                                                                                                                                                                                                                                                                                                                                                     |
| Immunogen              | Synthesized peptide derived from part region of human protein                                                                                                                                                                                                                                                                                                                                              |
| Specificity            | NEIL2 Polyclonal Antibody detects endogenous levels of protein.                                                                                                                                                                                                                                                                                                                                            |
| Purification           | The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen                                                                                                                                                                                                                                                                                       |
| Form                   | Liquid in PBS containing 50% glycerol, and 0.02% sodium azide.                                                                                                                                                                                                                                                                                                                                             |
| Gene Name              | NEIL2                                                                                                                                                                                                                                                                                                                                                                                                      |
| Accession No.          | Q969S2 Q6R2P8                                                                                                                                                                                                                                                                                                                                                                                              |
| Description            | nei like DNA glycosylase 2(NEIL2) Homo sapiens NEIL2 belongs to a class of DNA glycosylases homologous to the bacterial Fpg/Nei family. These glycosylases initiate the first step in base excision repair by cleaving bases damaged by reactive oxygen species and introducing a DNA strand break via the associated lyase reaction (Bandaru et al., 2002 [PubMed 12509226])[supplied by OMIM, Mar 2008], |

## Antibody Specification

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| Cell Pathway/<br>Category   | Base excision repair,                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Protein<br>Expression       | Amygdala,Brain,Fetal kidney,Muscle,Testis,                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Subcellular<br>Localization | nucleoplasm,cytoplasm,spindle microtubule,                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Protein Function            | <p>catalytic activity:Removes damaged bases from DNA, leaving an abasic site.,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.,domain:The zinc-finger domain is important for DNA binding.,enzyme regulation:Acetylation of Lys-50 leads to loss of DNA nicking activity. Acetylation of Lys-154 has no effect.,function:Involved in base excision repair of DNA damaged by oxidation or by mutagenic agents. Has DNA glycosylase activity towards 5-hydroxyuracil and other oxidized derivatives of cytosine with a preference for mismatched double stranded DNA (DNA bubbles). Has low or no DNA glycosylase activity towards thymine glycol, 2-hydroxyadenine, hypoxanthine and 8-oxoguanine. Has AP (apurinic/apyrimidinic) lyase activity and introduces nicks in the DNA strand. Cleaves the DNA backbone by beta-delta elimination to generate a single-strand break at the site of the removed base with both 3'- and 5'-phosphates.,similarity:Belongs to the FPG family.,similarity:Contains 1 FPG-type zinc finger.,subunit:Binds EP300.,tissue specificity:Detected in testis, skeletal muscle, heart, brain, placenta, lung, pancreas, kidney and liver.,</p> |
| Usage                       | For Research Use Only! Not for diagnostic or therapeutic procedures.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |