

## Immunotag™ p73 (Acetyl Lys327) Polyclonal Antibody

| Antibody Specification |                                                                                                                                                                    |
|------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Catalog No.            | ITK0038                                                                                                                                                            |
| Product Description    | Immunotag™ p73 (Acetyl Lys327) 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         | p73 (Lys327)                                                                                                                                                       |
| 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,Mouse,Rat                                                                                                                                                    |
| Host Species           | Rabbit                                                                                                                                                             |
| Immunogen              | The antiserum was produced against synthesized Acetyl-peptide derived from human p73 around the Acetylation site of Lys327. AA range:291-340                       |
| Specificity            | Acetyl-p73 (K327) Polyclonal Antibody detects endogenous levels of p73 protein only when acetylated at K327.                                                       |
| 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              | TP73                                                                                                                                                               |
| Accession No.          | O15350 Q9JJP2                                                                                                                                                      |
| Alternate Names        | TP73; P73; Tumor protein p73; p53-like transcription factor; p53-related protein                                                                                   |

## Antibody Specification

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| Description                 | tumor protein p73(TP73) Homo sapiens This gene encodes a member of the p53 family of transcription factors involved in cellular responses to stress and development. It maps to a region on chromosome 1p36 that is frequently deleted in neuroblastoma and other tumors, and thought to contain multiple tumor suppressor genes. The demonstration that this gene is monoallelically expressed (likely from the maternal allele), supports the notion that it is a candidate gene for neuroblastoma. Many transcript variants resulting from alternative splicing and/or use of alternate promoters have been found for this gene, but the biological validity and the full-length nature of some variants have not been determined. [provided by RefSeq, Feb 2011],                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Cell Pathway/<br>Category   | p53,Neurotrophin,                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Protein<br>Expression       | Colon,Hepatoma,Lymphocyte,Mammary cancer,Neuroblastoma,Skin,                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Subcellular<br>Localization | chromatin,nucleus,nucleoplasm,transcription factor complex,cytoplasm,mitochondrion,Golgi apparatus,cytosol,cell junction,intracellular membrane-bounded organelle,                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Protein Function            | cofactor:Binds 1 zinc ion per subunit.,disease:Maps to a chromosome region frequently mutated in diverse cell lines of human cancer. Appears not to be frequently mutated in human cancers, in contrast to p53. Hemizygosity is observed in neuroblastoma and oligodendroglioma.,domain:Possesses an acidic transactivation domain, a central DNA binding domain and a C-terminal oligomerization domain that binds to the ABL tyrosine kinase SH3 domain.,domain:The WW-binding motif mediates interaction with WWOX.,function:Participates in the apoptotic response to DNA damage. Isoforms containing the transactivation domain are pro-apoptotic, isoforms lacking the domain are anti-apoptotic and block the function of p53 and transactivating p73 isoforms. May be a tumor suppressor protein.,induction:Not induced by DNA damage. Isoforms lacking the transactivation domain block gene induction.,miscellaneous:Activated and stabilized by interaction with RANBP9.,PTM:Isoform alpha (but not isoform beta) is sumoylated on Lys-627, which potentiates proteasomal degradation but does not affect transcriptional activity.,similarity:Belongs to the p53 family.,similarity:Contains 1 SAM (sterile alpha motif) domain.,subcellular location:Accumulates in the nucleus in response to DNA damage.,subunit:Found in a complex with p53/TP53 and CABLES1. The C-terminal oligomerization domain binds to the ABL tyrosine kinase SH3 domain. Interacts with HECW2. Isoform Beta interacts homotypically and with p53/TP53, whereas isoform Alpha does not. Isoform Gamma interacts homotypically and with all p73 isoforms. Isoform Delta interacts with isoform Gamma, isoform Alpha, and homotypically. Isoforms Alpha and Beta interact with HIPK2. Isoform Alpha interacts with RANBP9. Isoform Beta interacts with WWOX.,tissue specificity:Brain, kidney, placenta, colon, heart, liver, spleen, skeletal muscle, prostate, thymus and pancreas. Highly expressed in fetal tissue., |
| Usage                       | For Research Use Only! Not for diagnostic or therapeutic procedures.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |