

# Immunotag™ Thioredoxin Polyclonal Antibody

| Antibody Specification |                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
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| Catalog No.            | ITT6065                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Product Description    | Immunotag™ Thioredoxin 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         | Thioredoxin                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Clonality              | Polyclonal                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Storage/Stability      | -20°C/1 year                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Application            | WB,IHC-p,ELISA                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Recommended Dilution   | IHC-p: 100-300.WB 1:500-2000, ELISA 1:10000-20000                                                                                                                                                                                                                                                                                                                                                                                                     |
| Concentration          | 1 mg/ml                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Reactive Species       | Human,Mouse,Rat                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Host Species           | Rabbit                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Immunogen              | Synthesized peptide derived from human Thioredoxin. at AA range: 52-101                                                                                                                                                                                                                                                                                                                                                                               |
| Specificity            | This antibody detects endogenous levels of Thioredoxin                                                                                                                                                                                                                                                                                                                                                                                                |
| 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              | TXN TRDX TRX TRX1                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Accession No.          | P10599 P10639                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Alternate Names        | Thioredoxin (Trx) (ATL-derived factor) (ADF) (Surface-associated sulphydryl protein) (SASP)                                                                                                                                                                                                                                                                                                                                                           |
| Description            | thioredoxin(TXN) Homo sapiens The protein encoded by this gene acts as a homodimer and is involved in many redox reactions. The encoded protein is active in the reversible S-nitrosylation of cysteines in certain proteins, which is part of the response to intracellular nitric oxide. This protein is found in the cytoplasm. Two transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Oct 2011], |

## Antibody Specification

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| Protein Expression       | Brain,Cajal-Retzius cell,Cerebellum,Cervix,Epithelium,Fetal brain cortex,Hepatocyte,Lens,Ma                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Subcellular Localization | nucleus,nucleoplasm,cytoplasm,mitochondrion,cytosol,extracellular exosome,                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Protein Function         | <p>function:ADF augments the expression of the interleukin-2 receptor TAC (IL2R/P55).,function:Participates in various redox reactions through the reversible oxidation of its active center dithiol to a disulfide and catalyzes dithiol-disulfide exchange reactions. Plays a role in the reversible S-nitrosylation of cysteine residues in target proteins, and thereby contributes to the response to intracellular nitric oxide. Nitrosylates the active site Cys of CASP3 in response to nitric oxide (NO), and thereby inhibits caspase-3 activity.,PTM:In the fully reduced protein, both Cys-69 and Cys-73 are nitrosylated in response to nitric oxide (NO). When two disulfide bonds are present in the protein, only Cys-73 is nitrosylated. Cys-73 can serve as donor for nitrosylation of target proteins.,similarity:Belongs to the thioredoxin family.,similarity:Contains 1 thioredoxin domain.,subunit:Homodimer; disulfide-linked. Interacts with TXNIP through the redox-active site. Interacts with MAP3K5 and CASP3.,</p> |
| Usage                    | For Research Use Only! Not for diagnostic or therapeutic procedures.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |