

## Immunotag™ PARP-2 Polyclonal Antibody

| Antibody Specification |                                                                                                                                                                                                                 |
|------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Catalog No.            | ITT3594                                                                                                                                                                                                         |
| Product Description    | Immunotag™ PARP-2 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         | PARP-2                                                                                                                                                                                                          |
| Clonality              | Polyclonal                                                                                                                                                                                                      |
| Storage/Stability      | -20°C/1 year                                                                                                                                                                                                    |
| Application            | WB,ELISA                                                                                                                                                                                                        |
| Recommended Dilution   | Western Blot: 1/500 - 1/2000. ELISA: 1/40000. Not yet tested in other applications.                                                                                                                             |
| Concentration          | 1 mg/ml                                                                                                                                                                                                         |
| Reactive Species       | Human,Mouse                                                                                                                                                                                                     |
| Host Species           | Rabbit                                                                                                                                                                                                          |
| Immunogen              | The antiserum was produced against synthesized peptide derived from human PARP2. AA range:151-200                                                                                                               |
| Specificity            | PARP-2 Polyclonal Antibody detects endogenous levels of PARP-2 protein.                                                                                                                                         |
| 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              | PARP2                                                                                                                                                                                                           |
| Accession No.          | Q9UGN5 O88554                                                                                                                                                                                                   |
| Alternate Names        | PARP2; ADPRT2; ADPRTL2; Poly [ADP-ribose] polymerase 2; PARP-2; hPARP-2; ADP-ribosyltransferase diphtheria toxin-like 2; ARTD2; NAD(+) ADP-ribosyltransferase 2; ADPRT-2; Poly[ADP-ribose] synthase 2; pADPRT-2 |

## Antibody Specification

|                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|-----------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Description                 | poly(ADP-ribose) polymerase 2(PARP2) Homo sapiens This gene encodes poly(ADP-ribosyl)transferase-like 2 protein, which contains a catalytic domain and is capable of catalyzing a poly(ADP-ribosyl)ation reaction. This protein has a catalytic domain which is homologous to that of poly (ADP-ribosyl) transferase, but lacks an N-terminal DNA binding domain which activates the C-terminal catalytic domain of poly (ADP-ribosyl) transferase. The basic residues within the N-terminal region of this protein may bear potential DNA-binding properties, and may be involved in the nuclear and/or nucleolar targeting of the protein. Two alternatively spliced transcript variants encoding distinct isoforms have been found. [provided by RefSeq, Jul 2008],                                                                                                                                                                                                                                                                                             |
| Cell Pathway/<br>Category   | Base excision repair,                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Protein<br>Expression       | Fetal brain,Fibroblast,Placenta,                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Subcellular<br>Localization | nucleus,nucleoplasm,nucleolus,cytoplasm,                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Protein Function            | catalytic activity:NAD(+) + (ADP-D-ribosyl)(n)-acceptor = nicotinamide + (ADP-D-ribosyl)(n+1)-acceptor.,function:Involved in the base excision repair (BER) pathway, by catalyzing the poly(ADP-ribosyl)ation of a limited number of acceptor proteins involved in chromatin architecture and in DNA metabolism. This modification follows DNA damages and appears as an obligatory step in a detection/signaling pathway leading to the reparation of DNA strand breaks.,PTM:Poly-ADP-ribosylated by PARP1.,similarity:Contains 1 PARP alpha-helical domain.,similarity:Contains 1 PARP catalytic domain.,subunit:Component of a base excision repair (BER) complex, containing at least XRCC1, PARP1, POLB and LIG3. Homo- and heterodimer with PARP1.,tissue specificity:Widely expressed, mainly in actively dividing tissues. The highest levels are in the brain, heart, pancreas, skeletal muscle and testis; also detected in kidney, liver, lung, placenta, ovary and spleen; levels are low in leukocytes, colon, small intestine, prostate and thymus., |
| Usage                       | For Research Use Only! Not for diagnostic or therapeutic procedures.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |