

Recombinant Protein Technical Manual Recombinant Human QPRT/QPRTase Protein (His Tag) RPES3590

## Product Data:

| Product SKU: | RPES3590 |
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Species: Human

**Size:** 10µg

Expression host: E. coli

**Uniprot:** Q15274

## **Protein Information:**

| Molecular Mass:    | 33.0 kDa  |
|--------------------|---|
| AP Molecular Mass: | 34 kDa  |
| Tag:               | N-6His  |
| Bio-activity:      |   |
| Purity:            | > 95 % as determined by reducing SDS-PAGE.  |
| Endotoxin:         | < 1.0 EU per $\mu g$ as determined by the LAL method.   |
| Storage:           | Store at < -20°C, stable for 6 months. Please minimize freeze-thaw cycles.  |
| Shipping:          | This product is provided as liquid. It is shipped at frozen temperature with blue ice/gel packs. Upon receipt, store it immediately at<-20°C. |
| Formulation:       | Supplied as a 0.2 $\mu m$ filtered solution of 20mM TrisHCl, 150mM NaCl, pH 8.0.  |
| Reconstitution:    | Please refer to the printed manual for detailed information.  |
| Application:       |   |
| Synonyms:          | Nicotinate-Nucleotide Pyrophosphorylase [Carboxylating]; Quinolinate<br>Phosphoribosyltransferase [Decarboxylating]; QAPRTase; QPRTase; QPRT  |

## Sequence: Met 1-His297

## Background:

Nicotinate-Nucleotide Pyrophosphorylase (QPRT) belongs to the nadC/modD family. QPRT plays an improtant role in catabolism of quinolinate which acts as a potent endogenous exitotoxin to neurons. In addition, QPRT serves as an an intermediate in the Tryptophan-Nicotinamide Adenine Dinucleotide pathway. QPRT participates in some pathways including Cofactor biosynthesis, NAD(+) biosynthesis and the Nicotinate D-Ribonucleotide from Quinolinate. In addition, QPRT is involved in the catabolism of Quinolinic Acid (QA). The activity toward QA is slightly repressed by phosphoribosylpyrophosphate (PRPP) in both a competitive and a non-competitive manner.