

Product Specification Sheet

Recombinant Rat GST T2-2
Product Number: GS39
Aliquot: 100 µg
Lot Number: gs39.151215
Storage: -70°C

- SPECIFIC ACTIVITY:** 13.18 Units/mg using spectrophotometric determination of NADPH oxidation coupled to the glutathione peroxidase activity of GST T2-2 on cumene hydroperoxide (1.5 mM) in the presence of reduced glutathione (1 mM) in 100 mM NaPO₄ (pH 7.0) at room temperature.
- CONCENTRATION:** 2.44 mg/mL total protein using the BCA protein assay with BSA as a standard.
- STORAGE BUFFER:** 50 mM Tris-HCl (pH 7.5), 50 mM NaCl, 1 mM DTT, 5 mM EDTA and 50% glycerol.
- STORAGE:** -70°C; **AVOID MULTIPLE FREEZE-THAW CYCLES.**
- PURITY:** ≥ 95% as assessed by inspection on a Coomassie® Blue-stained SDS-PAGE gel.
- MOLECULAR WEIGHT:** 23 kDa
- SOURCE:** Rat recombinant protein expressed in *E. coli*.

Note: This purified product exhibits high enzymatic activity for CDNB, the synthetic substrate that is most commonly used for GST analyses. However, as is widely known for GST activity analysis using CDNB as a substrate, low concentrations (high dilutions) of the enzyme result in lower activity values. In contrast, initial velocities are much higher for more concentrated levels of enzyme but the rate decreases rapidly. Therefore, activity toward CDNB and these considerations provide guidance when assaying this product under low concentrations or when using substrates other than CDNB.