

Product Specification Sheet

Recombinant Human GST M1-1

Product Number: GS65

Aliquot: 100 µg

Lot Number: gs65.071218

Storage: -20°C

SPECIFIC ACTIVITY: 68.9 Units/mg using spectrophotometric determination of 1-chloro-2,4-dinitrobenzene (CDNB) conjugation with reduced glutathione (1 mM) in 100 mM NaPO₄ (pH 6.5) at room temperature.

CONCENTRATION: 2.4 mg/mL total protein using the Bradford 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: -20°C; **AVOID MULTIPLE FREEZE-THAW CYCLES.**

PURITY: ≥ 95% as assessed by inspection on a Coomassie® Blue-stained SDS-PAGE gel.

MOLECULAR WEIGHT: 26 kDa

SOURCE: Human recombinant protein expressed in *E. coli*.

REFERENCES: Hayes, J.D. and Pulford, D.J., *Critical Reviews in Biochemistry and Molecular Biology*, **30**: 445-600 (1995)

Boyer, T.D., *Hepatology*, **9**: 468-496 (1989)

Arttamangkul, et al., *Anal. Biochem.*, **269** : 410-417 (1999)

Comstock, et al., *J. Biol. Chem.*, **268** : 16958-16975 (1993)

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.