Product Specification Sheet Recombinant Human GST S1-1 Product Number: GS05 Aliquot: 100 μg Lot Number: gs05.200110 Storage: -70°C

SPECIFIC ACTIVITY: 31.74 Units/mg using spectrophotometric determination of 1fluoro-2,4-dinitrobenzene (FDNB) conjugation with reduced glutathione (1 mM) in 100 mM NaPO₄ (pH 6.5) at room temperature. **CONCENTRATION:** 2.632 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:** -70°C; AVOID MULTIPLE FREEZE-THAW CYCLES. **PURITY:** \geq 95% as assessed by inspection on a Coomassie® Blue-stained SDS-PAGE gel. **MOLECULAR WEIGHT:** 23 kDa **SOURCE:** Human recombinant protein expressed in E. coli.

Note: This purified product exhibits high enzymatic activity for FDNB, a synthetic substrate used for GST analyses. However, as is widely known for GST activity analysis using FDNB 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 FDNB and these considerations provide guidance when assaying this product under low concentrations or when using substrates other than FDNB.