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## Recombinant Mouse GSTA3 Protein, N-His

Catalog Number: bs-105568P

Species: Mouse

AA Seq: 1-221/221

Predicted MW: 27.52 kDa

Tags: N-His

Activity: Not tested

Purity: >90% as determined by SDS-PAGE.

Purification: AC

Form: Lyophilized

Storage: Lyophilized from a solution in PBS pH 7.4, 0.02% NLS, 1mM EDTA, 4% Trehalose, 1% Mannitol.

Use a manual defrost freezer and avoid repeated freeze thaw cycles. Store at 2 to 8°C for frequent use. Store at -20 to -80°C for twelve months from the date of receipt.

**Background:** Cytosolic and membrane-bound forms of glutathione S-transferase are encoded by two distinct supergene families. These enzymes are involved in cellular defense against toxic, carcinogenic, and pharmacologically active electrophilic compounds. At present, eight distinct classes of the soluble cytoplasmic mammalian glutathione S-transferases have been identified: alpha, kappa, mu, omega, pi, sigma, theta and zeta. Glutathione S-transferase A3 (GSTA3) belongs to the alpha class genes that are located in a cluster mapped to chromosome 6. Genes of the alpha class are highly related and encode enzymes with glutathione peroxidase activity. However, during evolution, this alpha class gene diverged accumulating mutations in the active site that resulted in differences in substrate specificity and catalytic activity. GSTA3 catalyzes the double bond isomerization of precursors for progesterone and testosterone during the biosynthesis of steroid hormones.