Recombinant Human GSTAL Protein(Trx Tag)

Catalog Number: PDEH100656

Note: *Centrifuge before opening to ensure complete recovery of vial contents.*

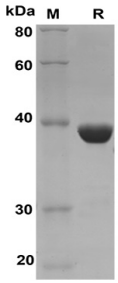
Description

Species	Human
Source	E.coli-derived Human GSTAL protein Met1-Phe222, with an N-terminal Trx
Calculated MW	44.4 kDa
Observed MW	39 kDa
Accession	P08263
Bio-activity	Not validated for activity

Properties

Purity	> 95% as determined by reducing SDS-PAGE.
Endotoxin	< 10 EU/mg of the protein as determined by the LAL method
Storage	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80 ℃. Reconstituted protein solution can be stored at 4-8℃ for 2-7 days. Aliquots of reconstituted samples are stable at < -20℃ for 3 months.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from a 0.2 μm filtered solution in PBS with 5% Trehalose and 5% Mannitol.
Reconstitution	It is recommended that sterile water be added to the vial to prepare a stock solution of 0.5 mg/mL. Concentration is measured by UV-Vis.

Data



SDS-PAGE analysis of Human GSTAL proteins, 2μg/lane of Recombinant Human GSTAL proteins was resolved with SDS-PAGE under reducing conditions, showing bands at 39 KD

Background

GSTA1 (Glutathione S-Transferase Alpha 1) is a Protein Coding gene. This gene encodes a member of a family of enzymes that function to add glutathione to target electrophilic compounds. Glutathione S-transferases (GSTs) are involved in the detoxification of carcinogens and may be linked to carcinogenesis. As a vital component of GSTs, GSTA1 plays an important role in carcinogenesis. GSTA1 expression may be a target molecule in the early diagnosis and treatment of lung cancer. Human colonic adenocarcinoma (Caco-2) cells in culture undergo spontaneous differentiation into mature enterocytes in association with progressive increases in expression of glutathione S-transferase alpha-1 (GSTA1). GSTA1 levels may play a role in modulating enterocyte proliferation but do not influence differentiation or apoptosis. GSTA1 may play a key role during pregnancy.