

## Polyclonal Antibody to Glutathione-S-Transferase alpha (GST alpha) - Serum

**Catalog No.:** AP00593SU-N

**Quantity:** 0.5 ml

**Background:** The human glutathione S-transferases (GSTs) are a large multigene family of isoenzymes, which catalyse the conjugation of glutathione to electrophilic substrates. These enzymes are involved in the detoxification of both endogenous and exogenous electrophiles, which can react with cellular components such as DNA. The modification of DNA by reactive compounds can initiate carcinogenesis and the GSTs are believed to play a role in cancer prevention by inactivating carcinogens. There are four major structural classes of mammalian cytosolic GSTs (alpha, mu, pi and theta).

**Host:** Rabbit

**Immunogen:** Purified glutathione S-transferase alpha from human liver

**Format:** **State:** Liquid, diluted antiserum

**Buffer System:** 10mM PBS, pH 7.4, with 0.2% BSA and 0.09% sodium azide

**Applications:** Immunohistology: This antibody is excellent for staining of formalin-fixed, paraffin-embedded tissues: 1:100-1:200 for 30 min at RT. Staining of formalin/paraffin tissues REQUIRES boiling tissue sections in 10 mM citrate buffer, pH 6.0, for 10-20 min followed by cooling at RT for 20 min.  
Positive Control: Kidney or proximal tubules.  
Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.

**Specificity:** This antibody specifically reacts with GST alpha.

Cellular Localization: nuclear and cytoplasmic.

**Species:** Human.

Other species not tested.

**Add. Information:** Molecular weight of antigen: 24-26kDa

**Storage:** Store the antibody at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing.  
Shelf life: one year from despatch.

**General Readings:** 1. Murray G I, et al. Journal of Pathology. 177: 147-152 (1995).  
2. Mehta R, et al. Cancer Letters. 84: 163-172 (1994).  
3. Cairns J, et al. Journal of Pathology. 166: 19-25 (1992).

**Pictures:**

Formalin-fixed, paraffin-embedded human kidney stained with GST-alpha Ab (Cat. AP00593) using peroxidase-conjugate and AEC chromogen. Note cytoplasmic staining of proximal tubular epithelium.

