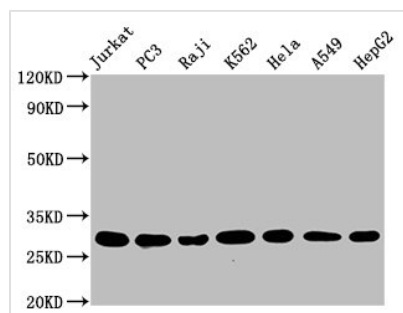




GSTO1 Recombinant Monoclonal Antibody

Product Code	CSB-RA009986A0HU
Abbreviation	Glutathione S-transferase omega-1
Storage	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.
Uniprot No.	P78417
Immunogen	A synthesized peptide derived from human GSTO1
Species Reactivity	Human
Tested Applications	ELISA, WB, IHC, IF; Recommended dilution: WB:1:500-1:5000, IHC:1:50-1:200, IF:1:20-1:200
Relevance	Exhibits glutathione-dependent thiol transferase and dehydroascorbate reductase activities. Has S-(phenacyl)glutathione reductase activity. Has also glutathione S-transferase activity. Participates in the biotransformation of inorganic arsenic and reduces monomethylarsonic acid (MMA) and dimethylarsonic acid.
Form	Liquid
Conjugate	Non-conjugated
Storage Buffer	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Purification Method	Affinity-chromatography
Isotype	Rabbit IgG
Clonality	Monoclonal
Alias	Glutathione S-transferase omega-1, Glutathione S-transferase omega 1-1, GSTO 1-1, Glutathione-dependent dehydroascorbate reductase, GSTO1, GSTTLP28
Immunogen Species	Homo sapiens (Human)
Research Area	Tags & Cell Markers
Gene Names	GSTO1
Clone No.	2C7

Image

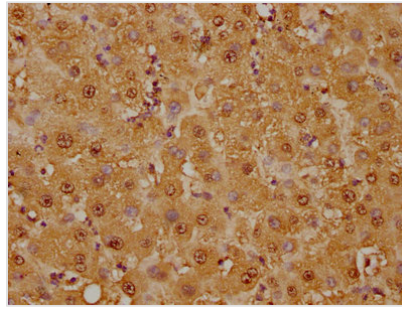


Western Blot

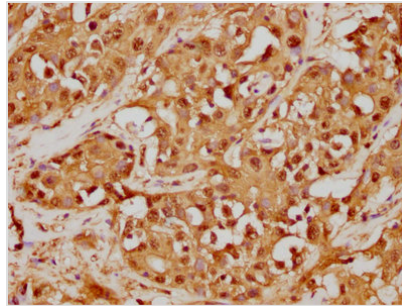
Positive WB detected in: Jurkat whole cell lysate, PC3 whole cell lysate, Raji whole cell lysate, K562 whole cell lysate, HeLa whole cell lysate, A549 whole cell lysate, HepG2 whole cell lysate
All lanes: GSTO1 antibody at 1.25µg/ml

Secondary

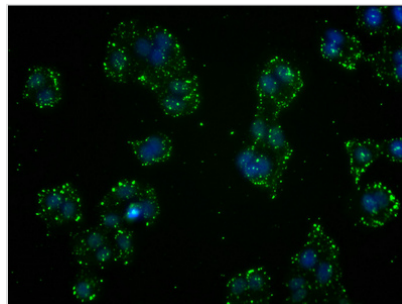
Goat polyclonal to rabbit IgG at 1/50000 dilution
Predicted band size: 28, 24, 25 KDa
Observed band size: 28 KDa



IHC image of CSB-RA009986A0HU diluted at 1:125 and staining in paraffin-embedded human liver tissue performed on a Leica BondTM system. After dewaxing and hydration, antigen retrieval was mediated by high pressure in a citrate buffer (pH 6.0). Section was blocked with 10% normal goat serum 30min at RT. Then primary antibody (1% BSA) was incubated at 4? overnight. The primary is detected by a biotinylated secondary antibody and visualized using an HRP conjugated SP system.



IHC image of CSB-RA009986A0HU diluted at 1:125 and staining in paraffin-embedded human liver cancer performed on a Leica BondTM system. After dewaxing and hydration, antigen retrieval was mediated by high pressure in a citrate buffer (pH 6.0). Section was blocked with 10% normal goat serum 30min at RT. Then primary antibody (1% BSA) was incubated at 4? overnight. The primary is detected by a biotinylated secondary antibody and visualized using an HRP conjugated SP system.



Immunofluorescence staining of HepG2 cells with CSB-RA009986A0HU at 1:41, counter-stained with DAPI. The cells were fixed in 4% formaldehyde, permeabilized using 0.2% Triton X-100 and blocked in 10% normal Goat Serum. The cells were then incubated with the antibody overnight at 4?. The secondary antibody was Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG (H+L).

Description

The recombinant GSTO1 antibody production commenced with the obtaining of genes encoding antibody against GSTO1. Antibody genes were obtained by sequencing and screening DNA reversely transcribed from RNA that was extracted from the B cells isolated from immunized animals. These genes were cloned into plasma vectors and subsequently transfected into a mammalian cell line for production. The product is the recombinant GSTO1 antibody. It underwent purification using affinity-chromatography from the cell culture medium. This recombinant GSTO1 antibody has been validated to detect the GSTO1 protein from Human in the ELISA, WB, IHC, IF.

GSTO1 is a cytosolic glutathione transferase enzyme that regulates glutathionylation, calcium channel modulation, and TLR signaling. GSTO1 also catalyzes the reduction of methylated arsenic species, protein deglutathionylation, dehydroascorbic acid, and S-phenacylglutathiones. GSTO1 dysregulation has been linked to oxidative stress and inflammation, as well as the etiology of a number of illnesses and neurological conditions. GSTO1 polymorphism and overexpression are associated with a variety of pathologic



conditions, including neurologic illnesses, malignancies, and inflammatory diseases. Upregulation of GSTO1 has been found in several human cancers including esophageal squamous cell carcinoma, colorectal, and urinary bladder cancer, and has also been involved in drug resistance.