

Anti-GST3 / GST pi Picoband Antibody

Catalog # ABO12832

Product Information

Application	WB, IHC-P, E
Primary Accession	Gstp1: P04906
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized
Description	Rabbit IgG polyclonal antibody for GST3 / GST pi detection. Tested with WB, IHC-P, Direct ELISA in Human;Mouse;Rat.
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Additional Information

Application Details	Western blot, 0.1-0.5 µg/ml Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml Direct ELISA, 0.1-0.5 µg/ml
Subcellular Localization	Cytoplasm . Mitochondrion . Nucleus . The 83 N-terminal amino acids function as un cleaved transit peptide, and arginine residues within it are crucial for mitochondrial localization. .
Tissue Specificity	Present in kidney, lung, testis and placenta, very low levels in liver.
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.
Immunogen	E. coli-derived rat GST3 / GST pi recombinant protein (Position: P2-Q210).
Purification	Immunogen affinity purified.
Cross Reactivity	No cross reactivity with other proteins.
Storage	At -20° C for one year. After r° Constitution, at 4° C for one month. It° Can also be aliquotted and stored frozen at -20° C for a longer time. Avoid repeated freezing and thawing.

Protein Information

Background

Glutathione S-transferases pi (GSTP1), also known as GST3, is an enzyme that in humans is encoded by the GSTP1 gene. This gene is mapped to 11q13.2. GSTP1 has 7 exons and 6 introns contained within approximately 2.8 kilobases. GSTP1 belongs to Glutathione S-transferases (GSTs) which are a family of enzymes that play an important role in detoxification by catalyzing the conjugation of many hydrophobic and electrophilic compounds with reduced glutathione. GSTP1 presents in all tissues and cells, with the exception of red cells, in which only erythrocyte GST(GSTe) is observed. What's more, GSTP1 is a polymorphic gene encoding active, functionally different GSTP1 variant proteins that are thought to function in xenobiotic metabolism and play a role in susceptibility to cancer, and other diseases.

Images

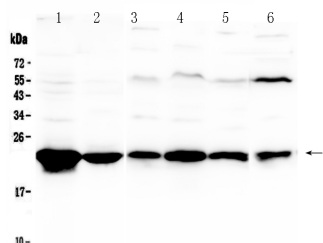


Figure 1. Western blot analysis of GST3 / GST pi using anti-GST3 / GST pi antibody (ABO12832). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions. Lane 1: rat lung tissue lysates, Lane 2: rat liver tissue lysates, Lane 3: mouse lung tissue lysates, Lane 4: mouse liver tissue lysates, Lane 5: mouse spleen tissue lysates, Lane 6: human Hela whole cell lysates. After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-GST3 / GST pi antigen affinity purified polyclonal antibody (Catalog # ABO12832) at 0.5 ug/mL overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for GST3 / GST pi at approximately 23KD. The expected band size for GST3 / GST pi is at 23KD.

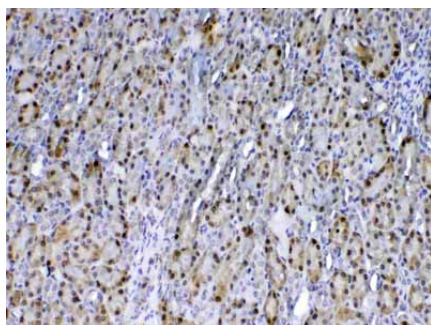
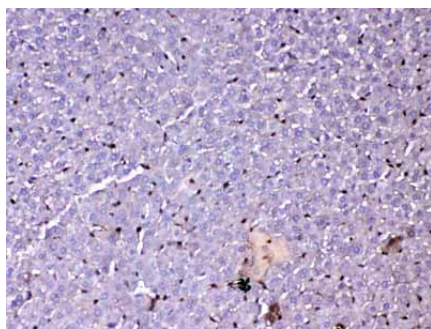


Figure 2. IHC analysis of GST3 / GST pi using anti-GST3 / GST pi antibody (ABO12832). GST3 / GST pi was detected in paraffin-embedded section of rat kidney tissue. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-GST3 / GST pi Antibody (ABO12832) overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) with DAB as the chromogen.

Figure 3. IHC analysis of GST3 / GST pi using anti-GST3 / GST pi antibody (ABO12832). GST3 / GST pi was detected in paraffin-embedded section of rat liver tissue. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-GST3 / GST pi Antibody (ABO12832) overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary



antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) with DAB as the chromogen.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.