

Anti-GST3/GST pi/Gstp1 Antibody Picoband®

Catalog Number: A00394-1

About Gstp1

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.

Overview

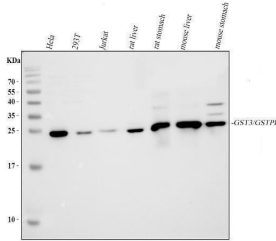
Product Name	Anti-GST3/GST pi/Gstp1 Antibody Picoband®
Reactive Species	Human, Mouse, Rat
Description	Boster Bio Anti-GST3/GST pi/Gstp1 Antibody Picoband® catalog # A00394-1. Tested in ELISA, IF, IHC, ICC, WB applications. This antibody reacts with Human, Mouse, Rat. The brand Picoband indicates this is a premium antibody that guarantees superior quality, high affinity, and strong signals with minimal background in Western blot applications. Only our best-performing antibodies are designated as Picoband, ensuring unmatched performance.
Application	ELISA, IF, IHC, ICC, WB
Clonality	Polyclonal
Formulation	Each vial contains 4mg Trehalose, 0.9mg NaCl, 0.2mg Na ₂ HPO ₄ , 0.05mg NaN ₃ .
Storage Instructions	Store at -20°C for one year from date of receipt. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for six months. Avoid repeated freeze-thaw cycles.
Host	Rabbit
Uniprot ID	P04906

Technical Details

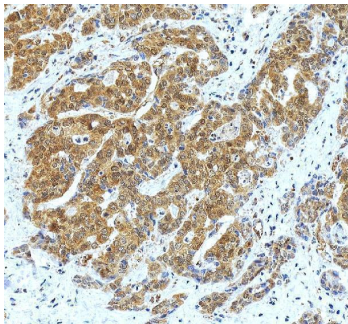
Immunogen	E. coli-derived rat GST3 / GST pi recombinant protein (Position: P2-Q210).
Recommended Detection Systems	Boster recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG (EK1002) for Western blot, and HRP Conjugated anti-Rabbit IgG Super Vision Assay Kit (SV0002-1) for IHC(P) and ICC.
Cross Reactivity	No cross-reactivity with other proteins.
Isotype	Rabbit IgG
Form	Lyophilized

Concentration	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml.
Purification	Immunogen affinity purified.
Suggested Dilutions	Western blot, 0.1-0.5ug/ml Immunohistochemistry (Paraffin-embedded Section), 0.5-1ug/ml Immunocytochemistry/Immunofluorescence, 5 ug/ml ELISA, 0.1-0.5ug/ml

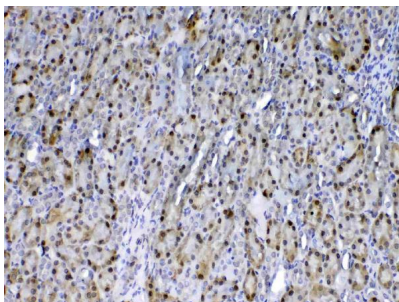
Anti-GST3/GST pi/Gstp1 Antibody Picoband® (A00394-1) Images



Western blot analysis of GST3 / GST pi using anti-GST3 / GST pi antibody (A00394-1). 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 30 ug of sample under reducing conditions. Lane 1: human HeLa whole cell lysates, Lane 2: human 293T whole cell lysates, Lane 3: human Jurkat whole cell lysates, Lane 4: rat liver tissue lysates, Lane 5: rat stomach tissue lysates, Lane 6: mouse liver tissue lysates, Lane 7: mouse stomach tissue lysates. After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA 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 # A00394-1) 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 1:5000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for GST3 / GST pi at approximately 25 kDa. The expected band size for GST3 / GST pi is at 23 kDa.

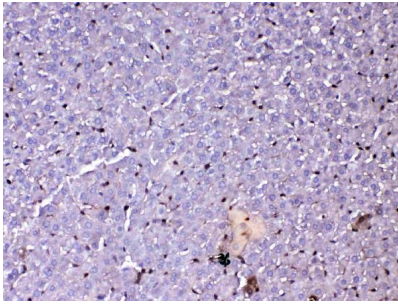


IHC analysis of GSTP1 using anti-GSTP1 antibody (A00394-1). GSTP1 was detected in a paraffin-embedded section of human liver cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 ug/ml rabbit anti-GSTP1 Antibody (A00394-1) overnight at 4°C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Catalog # SV0002) with DAB as the chromogen.

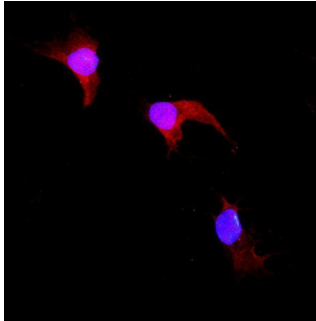


IHC analysis of GST3 / GST pi using anti-GST3 / GST pi antibody (A00394-1). GST3 / GST pi was detected in paraffin-embedded section of rat kidney tissue. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-GST3 / GST pi Antibody (A00394-1) overnight at 4 Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 The tissue section was developed using Streptavidin-Biotin-Complex (SABC)(Catalog # SA1022) with DAB as the chromogen.

IHC analysis of GST3 / GST pi using anti-GST3 / GST pi antibody (A00394-1). 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 (A00394-1) overnight at 4 Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 The tissue section was developed using Streptavidin-Biotin-Complex (SABC)(Catalog # SA1022) with DAB as the chromogen.



IF analysis of GST3 / GST pi using anti-GST3 / GST pi antibody (A00394-1). GST3 / GST pi was detected in an immunocytochemical section of NRK cells. Enzyme antigen retrieval was performed using IHC enzyme antigen retrieval reagent (AR0022) for 15 mins. The cells were blocked with 10% goat serum. And then incubated with 5 ug/mL rabbit anti-GST3 / GST pi Antibody (A00394-1) overnight at 4°C. DyLight®550 Conjugated Goat Anti-Rabbit IgG (BA1135) was used as secondary antibody at 1:100 dilution and incubated for 30 minutes at 37°C. The section was counterstained with DAPI. Visualize using a fluorescence microscope and filter sets appropriate for the label used.

4 Publications Citing This Product

1. PubMed ID: 26261505, Enhanced expression of stem cell markers and drug resistance in sphere-forming non-small cell lung cancer cells.
2. PubMed ID: 25834438, Yang P, Gao Z, Zhang H, Fang Z, Wu C, Xu H, Huang Qj. Neuropsychiatr Dis Treat. 2015 Mar 6;11:597-607. Doi: 10.2147/Ndt.S78131. Ecollection 2015. Changes In Proinflammatory Cytokines And White Matter In Chronically Stressed Rats.
3. PubMed ID: 30321868, Glutathione S-Transferases and Cytochrome P450 enzyme expression in patients with Intracranial Tumors: Preliminary Report of 55 Patients

Visit bosterbio.com/anti-gst3-gst-pi-picoband-trade-antibody-a00394-1-boster.html to see all 4 publications.

Submit a product review to Biocompare.com

Submit a review of this product to Biocompare.com to receive a \$20 Amazon.com giftcard! Your reviews help your fellow scientists make the right decisions. Thank you for your contribution.



Anti-GST3/GST pi/Gstp1 Antibody

For Research Use Only. Not for use in diagnostic procedures.