

Datasheet for ABIN5693290
anti-UGT1A1 antibody (AA 316-533)



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5 Images

Overview

| | |
|----------------------|--|
| Quantity: | 100 µg |
| Target: | UGT1A1 |
| Binding Specificity: | AA 316-533 |
| Reactivity: | Human, Mouse, Rat |
| Host: | Rabbit |
| Clonality: | Polyclonal |
| Application: | Western Blotting (WB), Immunohistochemistry (IHC), ELISA |

Product Details

| | |
|-----------------------------|--|
| Brand: | Picoband™ |
| Immunogen: | E. coli-derived human UGT1A1 recombinant protein (Position: E316-H533). |
| Cross-Reactivity (Details): | No cross reactivity with other proteins. |
| Characteristics: | Rabbit IgG polyclonal antibody for UGT1A1 detection. Tested with WB, IHC-P, Direct ELISA in Human, Mouse, Rat. |

Target Details

| | |
|-------------------|---|
| Target: | UGT1A1 |
| Alternative Name: | UGT1A1 (UGT1A1 Products) |
| Background: | Synonyms: UDP-glucuronosyltransferase 1-1, UDPGT 1-1, UGT1*1, UGT1-01, UGT1.1, Bilirubin-specific UDPGT isozyme 1, hUG-BR1, UDP-glucuronosyltransferase 1-A, UGT-1A, UGT1A, UDP-glucuronosyltransferase 1A1, UGT1A1, GNT1, UGT1 |

Target Details

Tissue Specificity: Isoform 1 and isoform 2 are expressed in liver, colon and small intestine. Isoform 2 but not isoform 1 is expressed in kidney. Isoform 1 and isoform 2 are not expressed in esophagus. Not expressed in skin.

Background: UDP-glucuronosyltransferase 1-1 also known as UGT-1A is an enzyme that in humans is encoded by the UGT1A1 gene. This gene encodes a UDP-glucuronosyltransferase, an enzyme of the glucuronidation pathway that transforms small lipophilic molecules, such as steroids, bilirubin, hormones, and drugs, into water-soluble, excretable metabolites. This gene is part of a complex locus that encodes several UDP-glucuronosyltransferases. The locus includes thirteen unique alternate first exons followed by four common exons. Four of the alternate first exons are considered pseudogenes. Each of the remaining nine 5' exons may be spliced to the four common exons, resulting in nine proteins with different N-termini and identical C-termini. Each first exon encodes the substrate binding site, and is regulated by its own promoter. The preferred substrate of this enzyme is bilirubin, although it also has moderate activity with simple phenols, flavones, and C18 steroids. Mutations in this gene result in Crigler-Najjar syndromes types I and II and in Gilbert syndrome.

UniProt: [P22309](#)

Pathways: [Steroid Hormone Biosynthesis, Regulation of Lipid Metabolism by PPARalpha](#)

Application Details

Application Notes: Recommended Detection Systems: Enhanced Chemiluminescent Kit with anti-Rabbit IgG (ABIN921124) for Western blot, and HRP Conjugated anti-Rabbit IgG Super Vision Assay Kit (SV0002-1) for IHC(P).

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

Restrictions: For Research Use only

Handling

Format: Lyophilized

Reconstitution: Add 0.2 mL of distilled water will yield a concentration of 500 µg/mL.

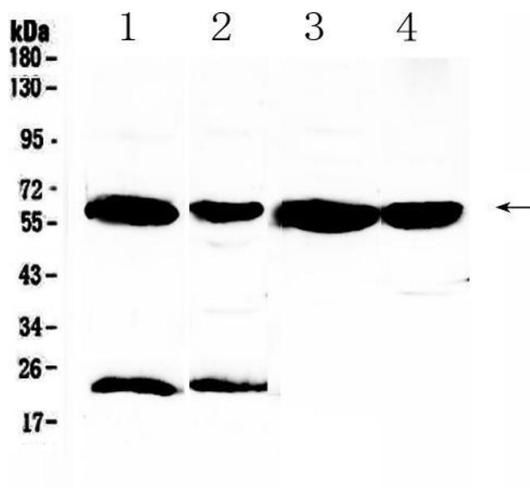
Buffer: Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na₂HPO₄, 0.05 mg NaN₃.

Preservative: Sodium azide

Handling

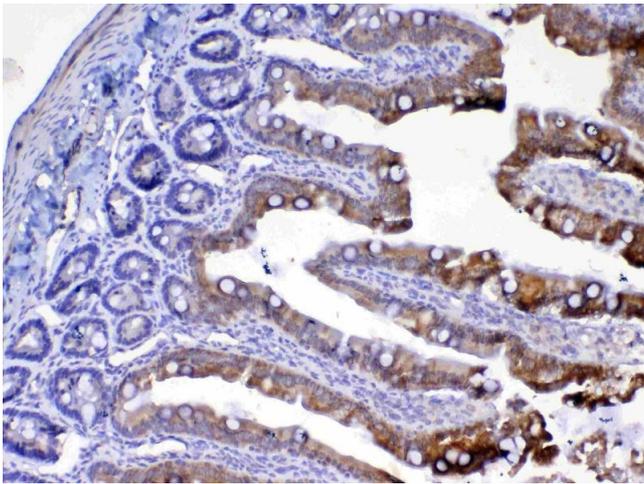
| | |
|--------------------|--|
| Precaution of Use: | This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only. |
| Storage: | 4 °C,-20 °C |
| Storage Comment: | At -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing and thawing. |

Images



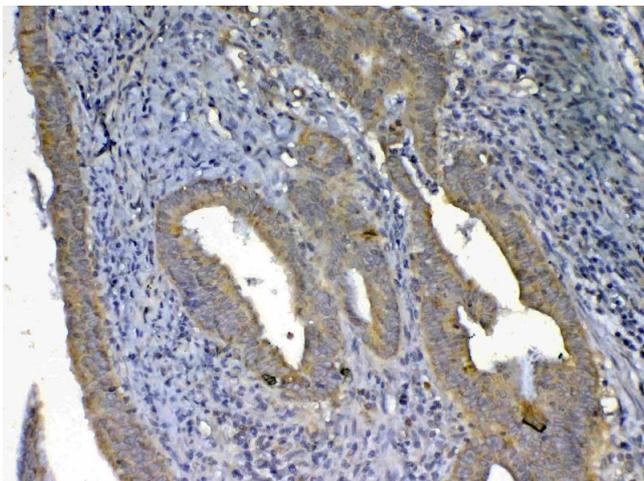
Western Blotting

Image 1. Western blot analysis of UGT1A1 using anti-UGT1A1 antibody . 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 liver tissue lysates, Lane 2: rat kidney tissue lysates, Lane 3: mouse liver tissue lysates, Lane 4: mouse kidney tissue 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-UGT1A1 antigen affinity purified polyclonal antibody (Catalog #) at 0.5 µg/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 (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for UGT1A1 at approximately 59KD. The expected band size for UGT1A1 is at 59KD.



Immunohistochemistry

Image 2. IHC analysis of UGT1A1 using anti-UGT1A1 antibody . UGT1A1 was detected in paraffin-embedded section of rat small intestine 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 1µg/ml rabbit anti-UGT1A1 Antibody 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)(Catalog # SA1022) with DAB as the chromogen.



Immunohistochemistry

Image 3. IHC analysis of UGT1A1 using anti-UGT1A1 antibody . UGT1A1 was detected in paraffin-embedded section of human rectal cancer 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 1µg/ml rabbit anti-UGT1A1 Antibody 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)(Catalog # SA1022) with DAB as the chromogen.

Please check the [product details page](#) for more images. Overall 5 images are available for ABIN5693290.