

UGT1A9 Antibody (N-Term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP22202a

Specification

UGT1A9 Antibody (N-Term) - Product Information

Application WB,E
Primary Accession 060656

Reactivity Human, Mouse

Host Rabbit
Clonality polyclonal
Isotype Rabbit IgG
Calculated MW 59941

UGT1A9 Antibody (N-Term) - Additional Information

Gene ID 54600

Other Names

UDP-glucuronosyltransferase 1-9, UDPGT 1-9, UGT1*9, UGT1-09, UGT1.9, 2.4.1.17, UDP-glucuronosyltransferase 1-I, UGT-1I, UGT1I, UDP-glucuronosyltransferase 1A9, lugP4, UGT1A9, GNT1, UGT1

Target/Specificity

This UGT1A9 antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 62-92 amino acids from human UGT1A9.

Dilution

WB~~1:2000

E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

UGT1A9 Antibody (N-Term) is for research use only and not for use in diagnostic or therapeutic procedures.

UGT1A9 Antibody (N-Term) - Protein Information

Name UGT1A9 (HGNC:12541)

Synonyms GNT1, UGT1



Function [Isoform 1]: UDP-glucuronosyltransferase (UGT) that catalyzes phase II biotransformation reactions in which lipophilic substrates are conjugated with glucuronic acid to increase the metabolite's water solubility, thereby facilitating excretion into either the urine or bile (PubMed: 12181437, PubMed: 15470161, PubMed: 15472229, PubMed: 18004212, PubMed: 18052087, PubMed: 18674515, PubMed: 19545173, PubMed: 15231852, PubMed: <u>21422672</u>, PubMed: <u>38211441</u>). Essential for the elimination and detoxification of drugs, xenobiotics and endogenous compounds (PubMed:12181437, PubMed:18004212). Catalyzes the glucuronidation of endogenous estrogen hormones such as estradiol and estrone (PubMed: 15472229). Involved in the glucuronidation of arachidonic acid (AA) and AA-derived eicosanoids including 15-HETE, PGB1 and F2-isoprostanes (8-iso-PGF2alpha and 5-epi-5-F2t-IsoP) (PubMed: 15231852, PubMed: 38211441). Glucuronates the phytochemical ferulic acid efficently at both the phenolic or the carboxylic acid group (PubMed: 21422672). Also catalyzes the glucuronidation of the isoflavones genistein, daidzein, glycitein, formononetin, biochanin A and prunetin, which are phytoestrogens with anticancer and cardiovascular properties (PubMed:18052087, PubMed:19545173). Involved in the glucuronidation of the AGTR1 angiotensin receptor antagonist caderastan, a drug which can inhibit the effect of angiotensin II (PubMed: 18674515). Involved in the biotransformation of 7-ethyl-10- hydroxycamptothecin (SN-38), the pharmacologically active metabolite of the anticancer drug irinotecan (PubMed: 12181437, PubMed: 20610558). Also metabolizes mycophenolate, an immunosuppressive agent (PubMed: 15470161, PubMed: 18004212).

Cellular Location

Endoplasmic reticulum membrane; Single-pass membrane protein

Tissue Location

[Isoform 1]: Expressed in liver, kidney, colon, esophagus and small intestine.

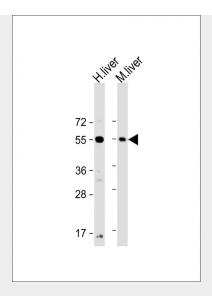
UGT1A9 Antibody (N-Term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- <u>Immunofluorescence</u>
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

UGT1A9 Antibody (N-Term) - Images





All lanes : Anti-UGT1A9 Antibody (N-Term) at 1:2000 dilution Lane 1: human liver lysate Lane 2: mouse liver lysate Lysates/proteins at 20 μ g per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 60 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

UGT1A9 Antibody (N-Term) - Background

UDPGT is of major importance in the conjugation and subsequent elimination of potentially toxic xenobiotics and endogenous compounds. This isoform has specificity for phenols. Isoform 2 lacks transferase activity but acts as a negative regulator of isoform 1.

UGT1A9 Antibody (N-Term) - References

Wooster R., et al. Biochem. J. 278:465-469(1991).

Ciotti M., et al. Submitted (MAR-1998) to the EMBL/GenBank/DDBJ databases.

Gong Q.H., et al. Pharmacogenetics 11:357-368(2001).

Hillier L.W., et al. Nature 434:724-731(2005).

Owens I.S., et al. Submitted (AUG-2000) to the EMBL/GenBank/DDBJ databases.