

UGT1A9 Antibody (N-Term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP22202a

Product Information

Application WB, E **Primary Accession** 060656

Reactivity Human, Rat, Mouse

HostRabbitClonalitypolyclonalIsotypeRabbit IgGClone NamesRB55233Calculated MW59941

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.

Protein Information

Name UGT1A9 (<u>HGNC:12541</u>)

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: 21422672, PubMed: 38211441). 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.

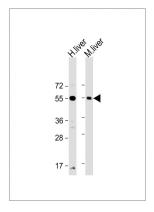
Background

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.

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.

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 µg 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.

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