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UGT1A9 Antibody (C-Term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP22204b

Product Information

Application	WB, E
Primary Accession	O60656
Other Accession	Q9HAW8, P22309, P35503, P22310, Q28612, P35504, P19224, Q28611, Q9HAW7, Q9HAW9
Reactivity	Human, Rat, Mouse
Predicted	Human
Host	Rabbit
Clonality	polyclonal
Isotype	Rabbit IgG
Clone Names	RB55234
Calculated MW	59941

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 408-439 amino acids from the 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 (C-Term) is for research use only and not for use in diagnostic or therapeutic procedures.

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: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

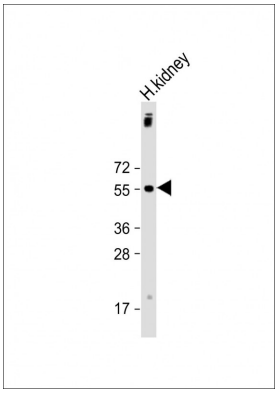
UDPGT is of major importance in the conjugation and subsequent elimination of potentially toxic xenobiotics and endogenous compounds. This isoform has specificity for phenols. Isoform 2 lacks transferase activity but acts as a negative regulator of isoform 1.

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

Anti-UGT1A9 Antibody (C-Term) at 1:2000 dilution + human kidney 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.



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