

Epoxide hydrolase 1 Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP55646

Product Information

Application	IHC-P, IHC-F, IF, ICC
Primary Accession	P07099
Reactivity	Rat, Pig, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	52949
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human EPHX1
Epitope Specificity	21-120/455
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Microsome membrane. Endoplasmic reticulum membrane.
SIMILARITY	Belongs to the peptidase S33 family.
DISEASE	Note=In some populations, the high activity haplotype tyr113/his139 is overrepresented among women suffering from pregnancy-induced hypertension (pre-eclampsia) when compared with healthy controls. Defects in EPHX1 are a cause of familial hypercholanemia (FHCA) [MIM:607748]. FHCA is a disorder characterized by elevated serum bile acid concentrations, itching, and fat malabsorption.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	Epoxide hydrolase is a critical biotransformation enzyme that converts epoxides from the degradation of aromatic compounds to trans-dihydrodiols which can be conjugated and excreted from the body. Epoxide hydrolase functions in both the activation and detoxification of epoxides. Mutations in this gene cause preeclampsia, epoxide hydrolase deficiency or increased epoxide hydrolase activity. Alternatively spliced transcript variants encoding the same protein have been found for this gene.[provided by RefSeq, Dec 2008]

Additional Information

Gene ID	2052
Other Names	Epoxide hydrolase 1, 3.3.2.9, EPHX1 (HGNC:3401), EPHX, EPOX
Target/Specificity	Found in liver.
Dilution	IHC-P=1:100-500,IHC-F=1:100-500,ICC=1:100-500,IF=1:100-500

Format	0.01M TBS(pH7.4) with 1% BSA, 0.09% (W/V) sodium azide and 50% Glyce
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Protein Information

Name	EPHX1 (HGNC:3401)
Synonyms	EPHX, EPOX
Function	Biotransformation enzyme that catalyzes the hydrolysis of arene and aliphatic epoxides to less reactive and more water soluble dihydrodiols by the trans addition of water (By similarity). Plays a role in the metabolism of endogenous lipids such as epoxide-containing fatty acids (PubMed: 22798687). Metabolizes the abundant endocannabinoid 2-arachidonoylglycerol (2-AG) to free arachidonic acid (AA) and glycerol (PubMed: 24958911). Binds 20(S)-hydroxycholesterol (20(S)-OHC) (By similarity).
Cellular Location	Microsome membrane; Single-pass type III membrane protein. Endoplasmic reticulum membrane {ECO:0000250 UniProtKB:P07687}; Single-pass type III membrane protein {ECO:0000250 UniProtKB:P07687}
Tissue Location	Found in liver..

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