10320 Camino Santa Fe, Suite G
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Anti-CYP2U1 Antibody
Catalog # ABO11328

Specification

Anti-CYP2U1 Antibody - Product Information

Application	**WB, IHC-P, ICC**
Primary Accession	Q7Z449
Host	**Rabbit**
Reactivity	**Human**
Clonality	**Polyclonal**
Format	**Lyophilized**

Description
Rabbit IgG polyclonal antibody for Cytochrome P450 2U1(CYP2U1) detection. Tested with WB, IHC-P, ICC in Human.

Reconstitution
Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-CYP2U1 Antibody - Additional Information

Gene ID 113612

Other Names
Cytochrome P450 2U1, 1.14.14.1, CYP2U1

Calculated MW
61987 MW KDa

Application Details
Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Human, By Heat

Immunocytochemistry , 0.5-1 µg/ml, Human, -
Western blot, 0.1-0.5 µg/ml, Human

Subcellular Localization
Endoplasmic reticulum membrane ; Multi-pass membrane protein . Microsome membrane .

Tissue Specificity
Widely expressed with stronger expression in thymus, heart and cerebellum. .

Protein Name
Cytochrome P450 2U1

Contents
Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg Thimerosal, 0.05mg NaN3.

Immunogen
A synthetic peptide corresponding to a sequence at the C-terminus of human CYP2U1(457-473aa EKPEDFYPNRFLDDQGQ).

Purification

Immunogen affinity purified.

Cross Reactivity
No cross reactivity with other proteins

Storage	**At -20˚C for one year. After r˚Constitution, 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.**

Anti-CYP2U1 Antibody - Protein Information

Name CYP2U1 {ECO:0000303|PubMed:14660610, ECO:0000312|HGNC:HGNC:20582}

Function
A cytochrome P450 monooxygenase involved in the metabolism of arachidonic acid and its conjugates (PubMed:14660610, PubMed:24563460). Mechanistically, uses molecular oxygen inserting one oxygen atom into a substrate, and reducing the second into a water molecule, with two electrons provided by NADPH via cytochrome P450 reductase (CPR; NADPH- ferrihemoprotein reductase) (PubMed:14660610, PubMed:24563460). Acts as an omega and omega-1 hydroxylase for arachidonic acid and possibly for other long chain fatty acids. May modulate the arachidonic acid signaling pathway and play a role in other fatty acid signaling processes (PubMed:14660610, PubMed:24563460). May down-regulate the biological activities of N-arachidonoyl-serotonin, an endocannabinoid that has anti-nociceptive effects through inhibition of fatty acid amide hydrolase FAAH, TRPV1 receptor and T-type calcium channels. Catalyzes C-2 oxidation of the indole ring of N-arachidonoyl-serotonin forming a less active product 2-oxo-N-arachidonoyl-serotonin (PubMed:24563460).

Cellular Location
Endoplasmic reticulum membrane; Multi-pass membrane protein. Microsome membrane; Multi-pass membrane protein. Mitochondrion inner membrane; Multi-pass membrane protein

Tissue Location
Widely expressed with stronger expression in thymus, heart and cerebellum.

Anti-CYP2U1 Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

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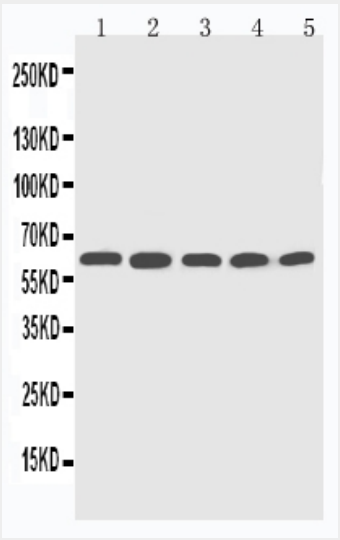
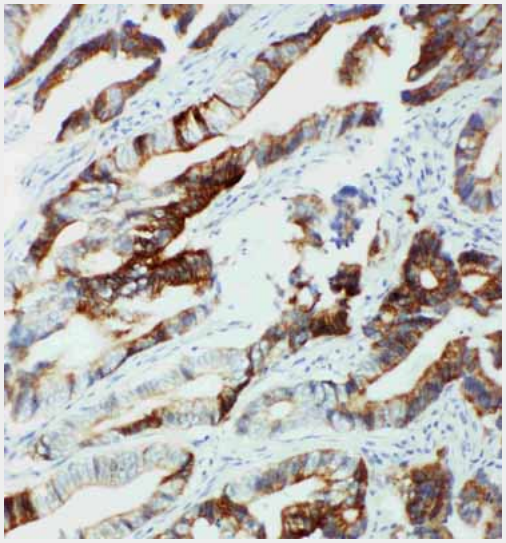
Anti-CYP2U1 Antibody - Images



Anti-CYP2U1 antibody, ABO11328, Western blottingLane 1: HELA Cell LysateLane 2: MCF-7 Cell LysateLane 3: MM453 Cell LysateLane 4: COLO320 Cell LysateLane 5: HT1080 Cell Lysate



Anti-CYP2U1 antibody, ABO11328, IHC(P)IHC(P): Human Intestinal Cancer Tissue

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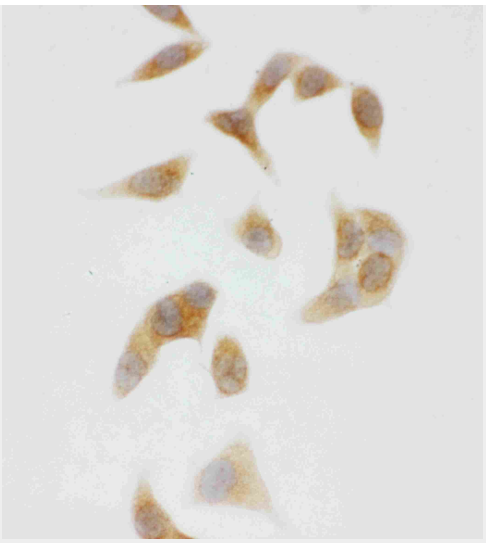

Anti-CYP2U1 antibody, ABO11328, ICCICC: HELA Cell

Anti-CYP2U1 Antibody - Background

CYP2U1(Cytochrome P450, Family 2, Subfamily U, Polypeptide 1), is a protein that in humans is encoded by the CYP2U1 gene. Members of the P450 enzyme family have roles in the tissue-specific conversion of substrates into locally active hormones, vitamins, and signaling molecules, including arachidonic acid derivatives known as eicosanoids. The International Radiation Hybrid Mapping Consortium mapped the CYP2U1 gene to chromosome 4.Chuang et al.(2004) stated that CYP2U1 maps to 4q25. Using recombination experiments in Sf9 insect cells, Chuang et al.(2004) found that CYP2U1 metabolized arachidonic acid, docosahexaenoic acid(DHA), and other long chain fatty acids. Chuang et al.(2004) suggested that CYP2U1 may play a role in brain and immune functions.