

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 EKPEDFYFYNRLDDQGQ).

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

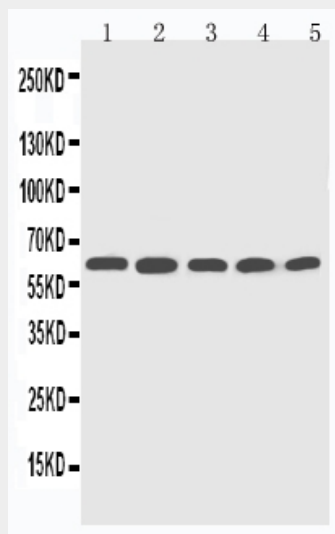
Widely expressed with stronger expression in thymus, heart and cerebellum.

Anti-CYP2U1 Antibody - Protocols

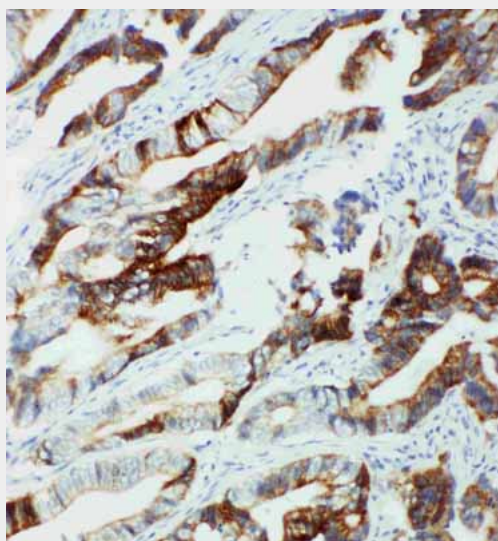
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

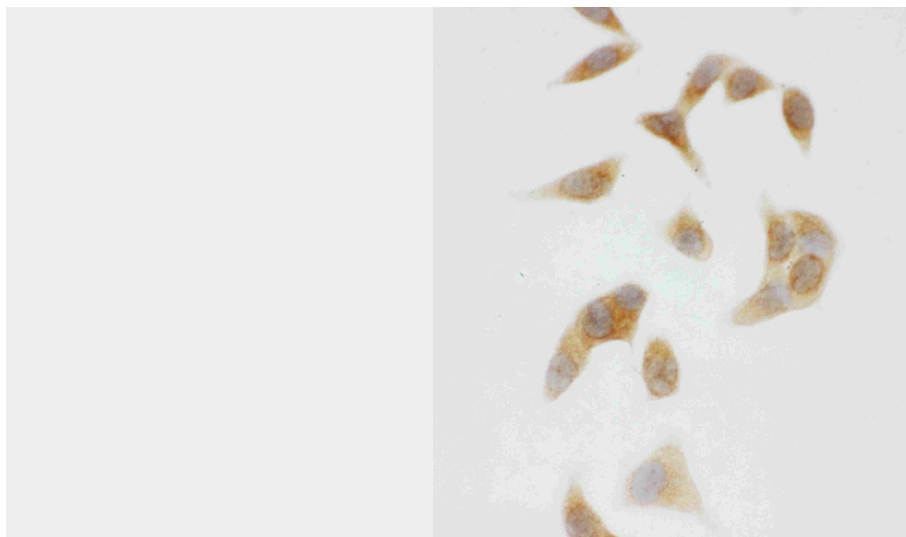
Anti-CYP2U1 Antibody - Images



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



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



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.