

ARG42966 anti-CYP2C19 antibody

Package: 50 µg
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes CYP2C19
Tested Reactivity	Hu, Ms, Rat
Tested Application	IHC-P, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	CYP2C19
Species	Human
Immunogen	Synthetic peptide corresponding to a sequence of Human CYP2C19. (QNQQSEFTIENLVITAADLLGAGTETT)
Conjugation	Un-conjugated
Alternate Names	Mephenytoin 4-hydroxylase; P450IIC19; P450C2C; Cytochrome P450 2C19; Cytochrome P450-254C; EC 1.14.13.49; EC 1.14.13.48; CYP2C; S; R; CYP11C17; CPCJ; EC 1.14.13.80; EC 1.14.13.-; CYP11C19; Cytochrome P450-11A

Application Instructions

Application table	Application	Dilution
	IHC-P	1:200 - 1:1000
	WB	1:500 - 1:2000
Application Note	IHC-P: Antigen Retrieval: Heat mediation was performed in Citrate buffer (pH 6.0) for 20 min. * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	
Observed Size	~ 56 kDa	

Properties

Form	Liquid
Purification	Affinity purification with immunogen.
Buffer	0.2% Na ₂ HPO ₄ , 0.9% NaCl, 0.05% Sodium azide and 4% Trehalose.
Preservative	0.05% Sodium azide
Stabilizer	4% Trehalose
Concentration	0.5 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated

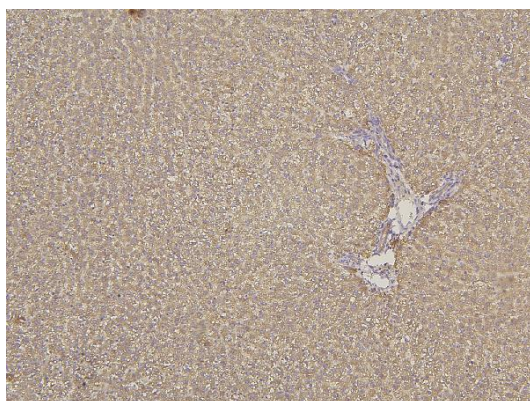
freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.

Note For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

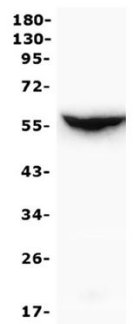
Gene Symbol	CYP2C19
Gene Full Name	cytochrome P450, family 2, subfamily C, polypeptide 19
Background	This gene encodes a member of the cytochrome P450 superfamily of enzymes. The cytochrome P450 proteins are monooxygenases which catalyze many reactions involved in drug metabolism and synthesis of cholesterol, steroids and other lipids. This protein localizes to the endoplasmic reticulum and is known to metabolize many xenobiotics, including the anticonvulsive drug mephenytoin, omeprazole, diazepam and some barbiturates. Polymorphism within this gene is associated with variable ability to metabolize mephenytoin, known as the poor metabolizer and extensive metabolizer phenotypes. The gene is located within a cluster of cytochrome P450 genes on chromosome 10q24. [provided by RefSeq, Jul 2008]
Function	A cytochrome P450 monooxygenase involved in the metabolism of polyunsaturated fatty acids (PUFA) (PubMed:18577768, PubMed:19965576, PubMed:20972997). 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 (NADPH--hemoprotein reductase) (PubMed:18577768, PubMed:19965576, PubMed:20972997). Catalyzes the hydroxylation of carbon-hydrogen bonds. Hydroxylates PUFA specifically at the omega-1 position (PubMed:18577768). Catalyzes the epoxidation of double bonds of PUFA (PubMed:20972997, PubMed:19965576). Also metabolizes plant monoterpenes such as limonene. Oxygenates (R)- and (S)-limonene to produce carveol and perillyl alcohol (PubMed:11950794). Responsible for the metabolism of a number of therapeutic agents such as the anticonvulsant drug S-mephenytoin, omeprazole, proguanil, certain barbiturates, diazepam, propranolol, citalopram and imipramine. Hydroxylates fenbendazole at the 4' position (PubMed:23959307). [UniProt]
Calculated Mw	56 kDa
Cellular Localization	Endoplasmic reticulum membrane; Peripheral membrane protein. Microsome membrane; Peripheral membrane protein. [UniProt]

Images



ARG42966 anti-CYP2C19 antibody IHC-P image

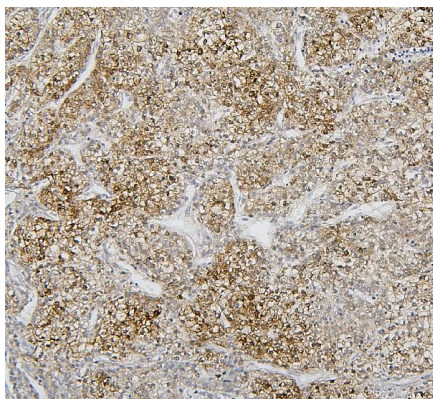
Immunohistochemistry: Paraffin-embedded Rat liver tissue. Antigen Retrieval: Heat mediation was performed in Citrate buffer (pH 6.0) for 20 min. The tissue section was blocked with 10% goat serum. The tissue section was then stained with ARG42966 anti-CYP2C19 antibody at 1 µg/ml dilution, overnight at 4°C.



Rat liver

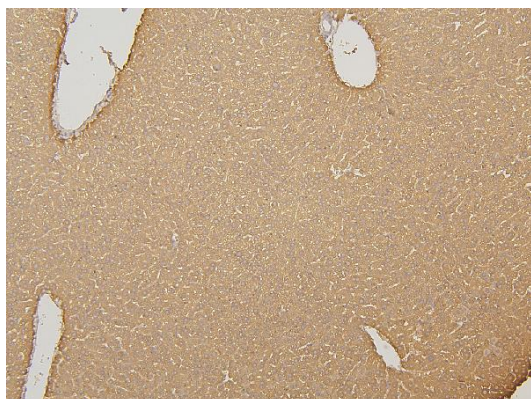
ARG42966 anti-CYP2C19 antibody WB image

Western blot: 50 µg of sample under reducing conditions. Rat liver lysate stained with ARG42966 anti-CYP2C19 antibody at 0.5 µg/ml dilution, overnight at 4°C.



ARG42966 anti-CYP2C19 antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human liver cancer tissue. Antigen Retrieval: Heat mediation was performed in Citrate buffer (pH 6.0) for 20 min. The tissue section was blocked with 10% goat serum. The tissue section was then stained with ARG42966 anti-CYP2C19 antibody at 1 µg/ml dilution, overnight at 4°C.



ARG42966 anti-CYP2C19 antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Mouse liver tissue. Antigen Retrieval: Heat mediation was performed in Citrate buffer (pH 6.0) for 20 min. The tissue section was blocked with 10% goat serum. The tissue section was then stained with ARG42966 anti-CYP2C19 antibody at 1 µg/ml dilution, overnight at 4°C.