Product name:	CYP2C19 Rabbit Polyclonal Antibody
Cat number:	ABN09652
Conjugate:	Unconjugated
Size:	100µL
Clone:	Polyclonal
Concentration:	1mg/ml
Host:	Rabbit
Isotype:	IgG
Immunogen:	The antiserum was produced against synthesized peptide derived from human Cytochrome P450 2C19. AA range:241-290
Reactivity:	Human,Rat,Mouse
Applications:	WB 1:500-1:2000,IHC 1:100-1:300,ICC/IF 1:200-1:1000,ELISA 1:5000-1:10000
Molecular Weight:	56kDa
Purification:	Affinity purification
Form:	Liquid
Buffer:	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
Storage:	Store at 4°C short term. Aliquot and store at -20°C for 12 months. Avoid freeze/thaw cycles.

Background:

cytochrome P450 family 2 subfamily C member 19(CYP2C19) Homo sapiens 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],catalytic activity:(+)-(R)-limonene + NADPH + O(2) = (+)-trans-carveol + NADP(+) + H(2)O.,catalytic activity:(-)-(S)-limonene + NADPH + O(2) = (-)-perillyl alcohol + NADP(+) + H(2)O.,catalytic activity:(-)-(S)-limonene + NADPH + O(2) = (-)-trans-carveol + NADP(+) + H(2)O.,caution:P450-254C was originally listed as a separate gene (CYP2C17). Resequencing demonstrated that it is not a separate gene, but a chimera. The 5'-portion corresponds to a partial 2C18 clone, and the 3'-portion corresponds to a partial 2C19 clone.,cofactor:Heme group.,function: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.,induction:P450 can be induced to high levels in liver and other tissues by various foreign compounds, including drugs, pesticides, and carcinogens.,online information:CYP2C19 alleles,polymorphism:Genetic variation in CYP2C19 is responsible for poor drug metabolism [MIM:609535]. Individuals can be characterized as either extensive metabolizers (EM) or poor metabolizers (PM). The PM phenotype is inherited in an autosomal recessive manner, with the EM phenotype comprising both homozygous dominant and heteroyzgote genotypes. There are marked interracial differences in the frequency of this polymorphism. Poor metabolizers represent 2-5% of Caucasians, 13-23% of Asian populations, and as many as 38-79% of individuals of some of the islands of Polynesia and Micronesia. Different alleles of CYP2C19 are known: CYP2C19*1A CYP2C19*1B, CYP2C19*1C, CYP2C19*2A (CYP2C19m1 or CYP2C19m1A), CYP2C19*2B (CYP2C19m1B), CYP2C19*2C (CYP2C19*21), CYP2C19*3A (CYP2C19m2), CYP2C19*3B (CYP2C19*20), CYP2C19*4 (CYP2C19m3), CYP2C19*5A (CYP2C19m4), CYP2C19*5B, CYP2C19*6, CYP2C19*7, CYP2C19*8, CYP2C19*9, CYP2C19*10, CYP2C19*11 CYP2C19*12, CYP2C19*13, CYP2C19*14 CYP2C19*15, CYP2C19*16, CYP2C19*18, CYP2C19*19. Defective CYP2C19*2 and CYP2C19*3 alleles are characterized by a splice mutation and a stop codon, respectively, and account for most of the PM alleles. The sequence shown is that of allele CYP2C19*1B.,similarity:Belongs to the cytochrome P450 family.,