

Mouse Cytochrome p450 2C19/CYP2C19 Monoclonal Antibody | anti-CYP2C19 antibody

Anti-Cytochrome p450 2C19/CYP2C19 Antibody (monoclonal, 10G5)

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA125921	Mouse	Human, Mouse, Rat, Monkey	Flow Cytometry, Functional Assay, Immunohistochemistry, Western Blot

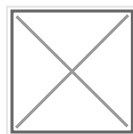
PRODUCT SYNONYMS

Cytochrome p450 2C19/CYP2C19; Monoclonal Antibody; Anti-Cytochrome p450 2C19/CYP2C19 Antibody (monoclonal; 10G5); Cytochrome P450 2C19; (R)-limonene 6-monooxygenase; (S)-limonene 6-monooxygenase; S)-limonene 7-monooxygenase; CYP11C17; CYP11C19; Cytochrome P450-11A; Cytochrome P450-254C; Fenbendazole monooxygenase (4'-hydroxylating)Curated; Mephenytoin 4-hydroxylase; CYP2C19; cytochrome P450 family 2 subfamily C member 19; anti-CYP2C19 antibody

PRODUCT SPECIFICATIONS

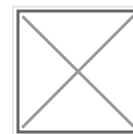
Host	Mouse
Reactivity	Human, Mouse, Rat, Monkey
Clonality	Monoclonal
Isotype	Mouse IgG1
Clone Number	10G5
Specificity	Mouse IgG monoclonal antibody for Cytochrome p450 2C19/CYP2C19 detection.
Purity/Purification	Immunogen affinity purified.
Form/Format	Lyophilized. Each vial contains 4mg Trehalose, 0.9mg NaCl, 0.2mg Na ₂ HPO ₄ , 0.01mg NaN ₃ .
Applicable Applications for anti-CYP2C19 antibody	FCM/FACS (Flow Cytometry), IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	A synthetic peptide corresponding to a sequence of human Cytochrome p450 2C19/CYP2C19 (QNQQSEFTIENLVITAADLLGAGTETT).
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.
Preparation and Storage	Store at -20 degree C for one year. After reconstitution, at 4 degree C for one month. It can also be aliquotted and stored frozen at -20 degree C for a longer time. Avoid repeated freezing and thawing.

IMAGES



FCM/FACS (Flow Cytometry)

Figure 4. Flow Cytometry analysis of U2OS cells using anti- Cytochrome p450 2C19/CYP2C19 antibody (AAA125921). Overlay histogram showing U2OS cells stained with AAA125921 (Blue line). The cells were blocked with 10% normal goat serum. And then incubated with mouse anti-Cytochrome p450 2C19/CYP2C19 Antibody (AAA125921, 1µg/1x10⁶ cells) for 30 min at 20 degree C. DyLight®488 conjugated goat anti-mouse IgG (BA1126, 5-10µg/1x10⁶ cells) was used as secondary antibody for 30 minutes at 20 degree C. Isotype control antibody (Green line) was mouse IgG (1µg/1x10⁶) used under the same conditions. Unlabelled sample (Red line) was also used as a control.



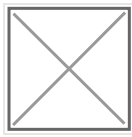
FCM/FACS (Flow Cytometry)

Figure 3. Flow Cytometry analysis of A431 cells using anti- Cytochrome p450 2C19/CYP2C19 antibody (AAA125921). Overlay histogram showing A431 cells stained with AAA125921 (Blue line). The cells were blocked with 10% normal goat serum. And then incubated with mouse anti-Cytochrome p450 2C19/CYP2C19 Antibody (AAA125921, 1µg/1x10⁶ cells) for 30 min at 20 degree C. DyLight®488 conjugated goat anti-mouse IgG (BA1126, 5-10µg/1x10⁶ cells) was used as secondary antibody for 30 minutes at 20 degree C. Isotype control antibody (Green line) was mouse IgG (1µg/1x10⁶) used under the same conditions. Unlabelled sample (Red line) was also used as a control.



IHC (Immunohistochemistry)

Figure 2. IHC analysis of Cytochrome p450 2C19/CYP2C19 using anti-Cytochrome p450 2C19/CYP2C19 antibody (AAA125921).Cytochrome p450 2C19/CYP2C19 was detected in paraffin-embedded section of human liver cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8. 0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1μg/ml mouse anti-Cytochrome p450 2C19/CYP2C19 Antibody (AAA125921) overnight at 4 degree C. Biotinylated goat anti-mouse IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) with DAB as the chromogen.



WB (Western Blot)

Figure 1. Western blot analysis of Cytochrome p450 2C19/CYP2C19 using anti-Cytochrome p450 2C19/CYP2C19 antibody (AAA125921).Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions.Lane 1: monkey liver tissue lysatesLane 2: rat liver tissue lysatesLane 3: mouse liver tissue lysates.After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1. 5 hour at RT. The membrane was incubated with mouse anti-Cytochrome p450 2C19/CYP2C19 antigen affinity purified monoclonal antibody (Catalog # AAA125921) at 0. 5 μg/mL overnight at 4 degree C, then washed with TBS-0. 1%Tween 3 times with 5 minutes each and probed with a goat anti-mouse IgG-HRP secondary antibody at a dilution of 1:10000 for 1. 5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for Cytochrome p450 2C19/CYP2C19 at approximately 55KD. The expected band size for Cytochrome p450 2C19/CYP2C19 is at 55KD.

ADDITIONAL INFORMATION

Related Product Information for anti-CYP2C19 antibody	Cytochrome P450 2C19 (abbreviated CYP2C19) 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.
References	1. "Entrez Gene: CYP2C19 cytochrome P450, family 2, subfamily C, polypeptide 19". 2. Fleming I (October 2014). "The pharmacology of the cytochrome P450 epoxigenase/soluble epoxide hydrolase axis in the vasculature and cardiovascular disease". Pharmacological Reviews. 66 (4): 1106-40.

NCBI AND UNIPROT INFORMATION

NCBI GI #	4503219
NCBI GeneID	1557
NCBI Accession #	NP_000760.1
NCBI GenBank Nucleotide #	NM_000769.1
UniProt Accession #	P33261; P33259; Q8WZB1; Q8WZB2; Q9UCD4
NCBI Official Full Name	cytochrome P450 2C19
NCBI Official Synonym Full Names	cytochrome P450, family 2, subfamily C, polypeptide 19
NCBI Official Symbol	CYP2C19
NCBI Official Synonym Symbols	CPCJ; CYP2C; P450C2C; P450IIC19
NCBI Protein Information	cytochrome P450 2C19; CYP11C17; CYP11C19; cytochrome P450-11A; cytochrome P450-254C; cytochrome P-450 II C; microsomal monooxygenase; xenobiotic monooxygenase; mephenytoin 4-hydroxylase; mephenytoin 4'-hydroxylase; S-mephenytoin 4-hydroxylase; (R)-limonen
UniProt Protein Name	Cytochrome P450 2C19
UniProt Gene Name	CYP2C19
UniProt Entry Name	CP2CJ_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/monoclonal/cytochrome-p450-2c19-cyp2c19-antibody-clone-10g5-flow-cytometry-immunohistochemistry-western-blot-elisa/125921>