

## ARG41317 anti-Cytochrome P450 1A1 antibody

Package: 50 µg  
Store at: -20°C

### Summary

|                     |   |
|---------------------|---|
| Product Description | Rabbit Polyclonal antibody recognizes Cytochrome P450 1A1   |
| Tested Reactivity   | Hu, Ms, Rat   |
| Tested Application  | FACS, ICC/IF, IHC-Fr, IHC-P, WB   |
| Host                | Rabbit  |
| Clonality           | Polyclonal  |
| Isotype             | IgG   |
| Target Name         | Cytochrome P450 1A1   |
| Species             | Human   |
| Immunogen           | Recombinant protein corresponding to aa. H183-D320 of Human Cytochrome P450 1A1.  |
| Conjugation         | Un-conjugated   |
| Alternate Names     | P450DX; P1-450; Cytochrome P450-C; Cytochrome P450 1A1; AHH; EC 1.14.14.1; AHRR; P450-C; CYP1; Cytochrome P450 form 6; CYP1A1; CP11; Cytochrome P450-P1 |

### Application Instructions

| Application table | Application   | Dilution       |
|-------------------|---|----------------|
|                   | FACS  | 1:150 - 1:500  |
|                   | ICC/IF  | 1:200 - 1:1000 |
|                   | IHC-Fr  | 1:200 - 1:1000 |
|                   | 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.<br>* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist. |                |
| Observed Size     | 57 kDa  |                |

### Properties

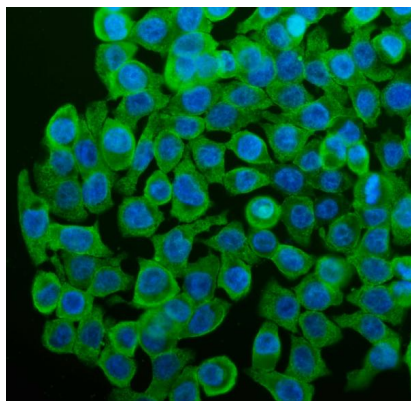
|              |   |
|--------------|---|
| Form         | Liquid  |
| Purification | Affinity purification with immunogen.   |
| Buffer       | 0.2% Na <sub>2</sub> HPO <sub>4</sub> , 0.9% NaCl, 0.05% Sodium azide and 5% BSA. |
| Preservative | 0.05% Sodium azide  |
| Stabilizer   | 5% BSA  |

|                     |  |
|---------------------|--|
| 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

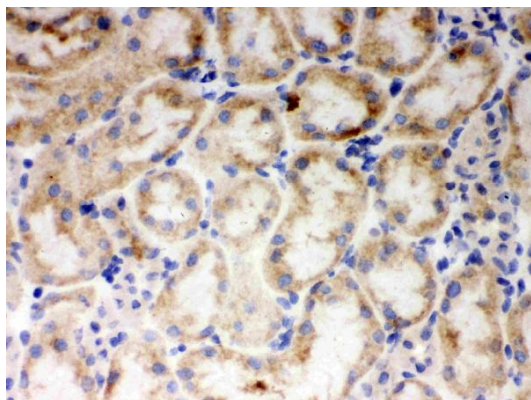
|                       |   |
|-----------------------|---|
| Gene Symbol           | CYP1A1  |
| Gene Full Name        | cytochrome P450, family 1, subfamily A, polypeptide 1   |
| Background            | This gene, CYP1A1, encodes a member of the cytochrome P450 superfamily of enzymes. The cytochrome 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 its expression is induced by some polycyclic aromatic hydrocarbons (PAHs), some of which are found in cigarette smoke. The enzyme's endogenous substrate is unknown; however, it is able to metabolize some PAHs to carcinogenic intermediates. The gene has been associated with lung cancer risk. A related family member, CYP1A2, is located approximately 25 kb away from CYP1A1 on chromosome 15. [provided by RefSeq, Jul 2008] |
| Function              | Cytochromes P450 are a group of heme-thiolate monooxygenases. In liver microsomes, this enzyme is involved in an NADPH-dependent electron transport pathway. It oxidizes a variety of structurally unrelated compounds, including steroids, fatty acids, and xenobiotics. [UniProt]   |
| Calculated Mw         | 58 kDa  |
| Cellular Localization | Endoplasmic reticulum membrane; Peripheral membrane protein. Microsome membrane; Peripheral membrane protein. [UniProt]   |

## Images



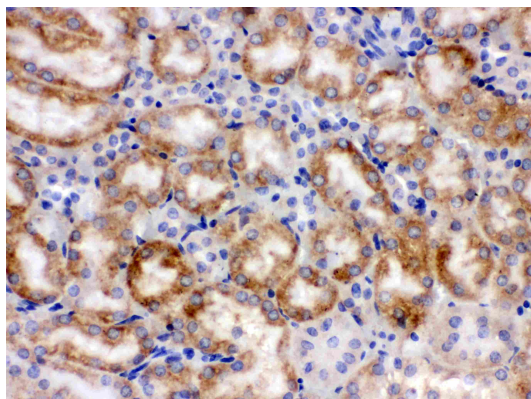
ARG41317 anti-Cytochrome P450 1A1 antibody ICC/IF image

Immunofluorescence: Caco-2 cells were blocked with 10% goat serum and then stained with ARG41317 anti-Cytochrome P450 1A1 antibody (green) at 2 µg/ml dilution, overnight at 4°C. DAPI (blue) for nuclear staining.



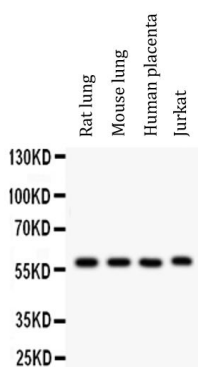
ARG41317 anti-Cytochrome P450 1A1 antibody IHC-Fr image

Immunohistochemistry: Frozen section of Mouse kidney tissue. The tissue section was blocked with 10% goat serum. The tissue section was then stained with ARG41317 anti-Cytochrome P450 1A1 antibody at 1 µg/ml dilution, overnight at 4°C.



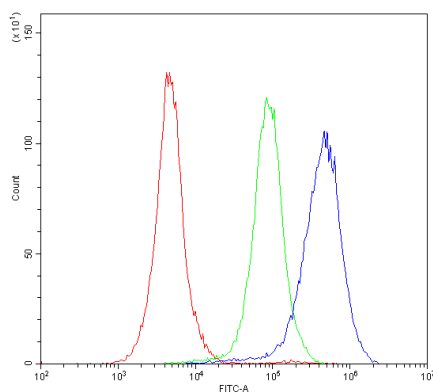
ARG41317 anti-Cytochrome P450 1A1 antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Mouse kidney tissue. Antigen Retrieval: Heat mediation was performed in Citrate buffer (pH 6.0, epitope retrieval solution) for 20 min. The tissue section was blocked with 10% goat serum. The tissue section was then stained with ARG41317 anti-Cytochrome P450 1A1 antibody at 1 µg/ml dilution, overnight at 4°C.



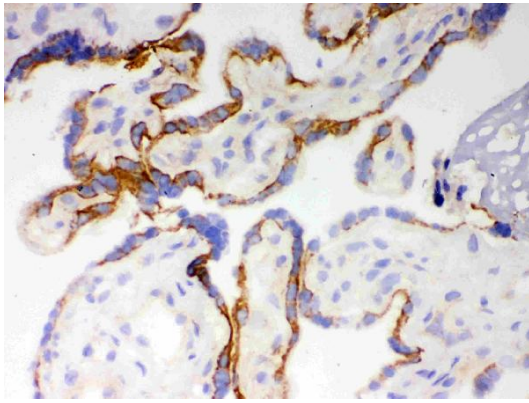
ARG41317 anti-Cytochrome P450 1A1 antibody WB image

Western blot: 50 µg of samples under reducing conditions. Rat lung, Mouse lung, Human placenta and Jurkat whole cell lysates stained with ARG41317 anti-Cytochrome P450 1A1 antibody at 0.5 µg/ml dilution, overnight at 4°C.



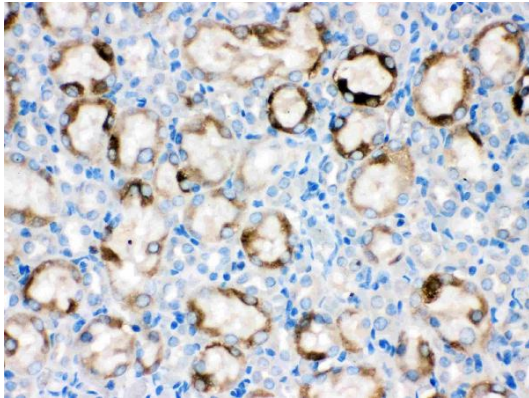
ARG41317 anti-Cytochrome P450 1A1 antibody FACS image

Flow Cytometry: Caco-2 cells were blocked with 10% normal goat serum and then stained with ARG41317 anti-Cytochrome P450 1A1 antibody (blue) at 1 µg/10<sup>6</sup> cells, for 30 min at 20°C, followed by incubation with DyLight®488 labelled secondary antibody. Isotype control antibody (green) was Rabbit IgG (1 µg/10<sup>6</sup> cells) used under the same conditions. Unlabelled sample (red) was also used as a control.



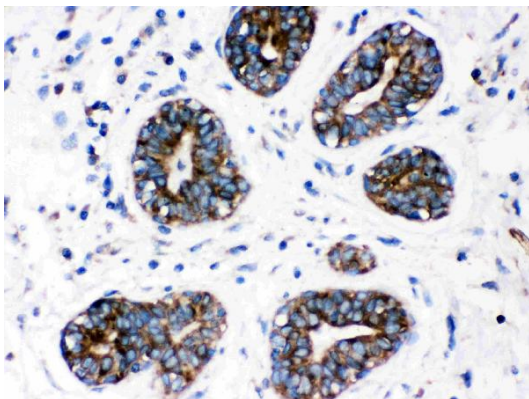
ARG41317 anti-Cytochrome P450 1A1 antibody IHC-Fr image

Immunohistochemistry: Frozen section of Human placenta tissue. The tissue section was blocked with 10% goat serum. The tissue section was then stained with ARG41317 anti-Cytochrome P450 1A1 antibody at 1 µg/ml dilution, overnight at 4°C.



ARG41317 anti-Cytochrome P450 1A1 antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Rat kidney 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 ARG41317 anti-Cytochrome P450 1A1 antibody at 1 µg/ml dilution, overnight at 4°C.



ARG41317 anti-Cytochrome P450 1A1 antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human mammary 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 ARG41317 anti-Cytochrome P450 1A1 antibody at 1 µg/ml dilution, overnight at 4°C.