**BACKGROUND**

CYP1A2, also called cytochrome P450 1A2, is a heme-thiolate monoxygenase enzyme involved in the NADPH-dependent electron transport pathway of liver microsomes. A member of the cytochrome P450 family, CYP1A2 oxidizes fatty acids, steroids and xenobiotics. It is also involved in the metabolism of imiprimine, propranol and clozapine. CYP1A2 localizes to the membrane of the endoplasmic reticulum. It is induced by 3-methylcholanthrene, insulin, modafinil and hyperforin and inhibited by many fluoroquinolone antibiotics, caffeine, fluvoxamine and cimetidine. In addition, the involvement of CYP1A2 in the metabolism of estrogen is associated with a reduced risk of breast cancer.

**REFERENCES**


**CHROMOSOMAL LOCATION**

Genetic locus: CYP1A2 (human) mapping to 15q24.1; Cyp1a2 (mouse) mapping to 9 B.

**SOURCE**

CYP1A2 (H-70) is a rabbit polyclonal antibody raised against amino acids 246-315 mapping within an internal region of CYP1A2 of human origin.

**PRODUCT**

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

**STORAGE**

Store at 4°C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

**APPLICATIONS**

CYP1A2 (H-70) is recommended for detection of CYP1A2 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for CYP1A2 siRNA (h): sc-41485, CYP1A2 siRNA (m): sc-41486, CYP1A2 shRNA Plasmid (h): sc-41485-SH, CYP1A2 shRNA Plasmid (m): sc-41486-SH, CYP1A2 shRNA (h) Lentiviral Particles: sc-41485-V and CYP1A2 shRNA (m) Lentiviral Particles: sc-41486-V. Molecular Weight of CYP1A2: 54 kDa.

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Positive Controls: A549 cell lysate: sc-2413, A-431 whole cell lysate: sc-2201 or mouse liver extract: sc-2256.

**RECOMMENDED SECONDARY REAGENTS**

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

**DATA**

**SELECT PRODUCT CITATIONS**


Try CYP1A2 (D15): sc-53241 or CYP1A2 (D-3): sc-393783, our highly recommended monoclonal alternatives to CYP1A2 (H-70).