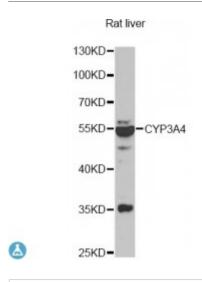


Anti-CYP3A4 Antibody



Description This gene encodes a member of the cytochrome P450 superfamily of

enzymes. The cytochrome P450 proteins are monooxygenases that 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 glucocorticoids and some pharmacological agents. This enzyme is involved in the metabolism of approximately half the drugs in use today, including acetaminophen, codeine, cyclosporin A, diazepam and erythromycin. The enzyme also metabolizes some steroids and carcinogens. This gene is part of a cluster of cytochrome P450 genes on chromosome 7q21.1. Previously another CYP3A gene, CYP3A3, was thought to exist; however, it is now thought that this sequence represents a transcript variant of CYP3A4. Alternatively spliced transcript variants encoding different isoforms have been identified.

Model STJ115444

Host Rabbit

Reactivity Human, Mouse, Rat

Applications IHC, WB

Immunogen Recombinant fusion protein containing a sequence corresponding to amino

acids 244-503 of human CYP3A4 (NP_059488.2).

Gene ID 1576

Gene Symbol CYP3A4

Dilution range WB 1:500 - 1:2000

IHC 1:50 - 1:200

Tissue Specificity Expressed in prostate and liver, According to some authors, it is not expressed

in brain

Purification Affinity purification

Note For Research Use Only (RUO).

Protein Name Cytochrome P450 3A4

Molecular Weight 57.343 kDa

Clonality Polyclonal

Conjugation Unconjugated

Isotype IgG

Formulation PBS with 0.02% sodium azide, 50% glycerol, pH7.3.

Storage Instruction Store at -20C. Avoid freeze / thaw cycles.

Database Links HGNC:2637OMIM:124010Reactome:R-HSA-211981

Alternative Names Cytochrome P450 3A4

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 performs a variety of oxidation reactions (e,g, caffeine 8-

oxidation, omeprazole sulphoxidation, midazolam 1'-hydroxylation and midazolam 4-hydroxylation) of structurally unrelated compounds, including

steroids, fatty acids, and xenobiotics, Acts as a 1,8-cineole 2-exomonooxygenase, The enzyme also hydroxylates etoposide,

Cellular Localization Endoplasmic reticulum membrane

Post-translational Polyubiquitinated in the presence of AMFR and UBE2G1 and also

Modifications STUB1/CHIP and UBE2D1 (in vitro),

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