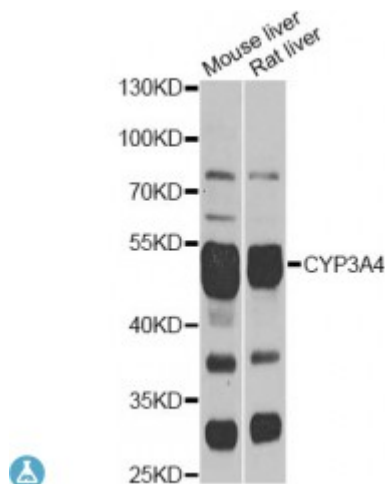


## Anti-CYP3A4 Antibody



### 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.

|                           |  |
|---------------------------|--|
| <b>Model</b>              | STJ115445  |
| <b>Host</b>               | Rabbit   |
| <b>Reactivity</b>         | Mouse, Rat   |
| <b>Applications</b>       | WB   |
| <b>Immunogen</b>          | Recombinant fusion protein containing a sequence corresponding to amino acids 244-503 of human CYP3A4 (NP_059488.2). |
| <b>Gene ID</b>            | <a href="#">1576</a>   |
| <b>Gene Symbol</b>        | <a href="#">CYP3A4</a>   |
| <b>Dilution range</b>     | WB 1:500 - 1:2000  |
| <b>Tissue Specificity</b> | Expressed in prostate and liver, According to some authors, it is not expressed                                      |

|   |  |
|---|--|
|   | in brain   |
| <b>Purification</b>                     | Affinity purification  |
| <b>Note</b>                             | For Research Use Only (RUO).   |
| <b>Protein Name</b>                     | Cytochrome P450 3A4  |
| <b>Molecular Weight</b>                 | 57.343 kDa   |
| <b>Clonality</b>                        | Polyclonal   |
| <b>Conjugation</b>                      | Unconjugated   |
| <b>Isotype</b>                          | IgG  |
| <b>Formulation</b>                      | PBS with 0.02% sodium azide, 50% glycerol, pH7.3.  |
| <b>Storage Instruction</b>              | Store at -20C. Avoid freeze / thaw cycles.   |
| <b>Database Links</b>                   | <a href="#">HGNC:2637OMIM:124010Reactome:R-HSA-211981</a>  |
| <b>Alternative Names</b>                | Cytochrome P450 3A4  |
| <b>Function</b>                         | 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 sulfoxidation, midazolam 1'-hydroxylation and midazolam 4-hydroxylation) of structurally unrelated compounds, including steroids, fatty acids, and xenobiotics, Acts as a 1,8-cineole 2-exo-monooxygenase, The enzyme also hydroxylates etoposide , |
| <b>Cellular Localization</b>            | Endoplasmic reticulum membrane   |
| <b>Post-translational Modifications</b> | Polyubiquitinated in the presence of AMFR and UBE2G1 and also STUB1/CHIP and UBE2D1 (in vitro),  |