**BACKGROUND**

CYP3A genes encode monoxygenases, enzymes which catalyze drug metabolism and the synthesis of cholesterol, steroids and other lipids. CYP3A (cytochrome P450, family 3, subfamily A), the most abundant p450 enzyme in human liver, is responsible for the metabolism of more than 50% of all clinical drugs. CYP3A members localize in organs that associate with drug disposition, including the liver, gastrointestinal tract and kidney. The CYP3A cluster consists of four genes: CYP3A43, CYP3A4, CYP3A7 and CYP3A5, and two pseudogenes: CYP3A5P1 and CYP3A5P2. The CYP3A cluster maps to gene locus 7q22.1.

**REFERENCES**


**SOURCE**

CYP3A (L-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of CYP3A41 of mouse origin.

**PRODUCT**

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

Blocking peptide available for competition studies, sc-30621 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

**STORAGE**

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

**APPLICATIONS**

CYP3A (L-14) is recommended for detection of CYP3A11, CYP3A16, CYP3A41, CYP3A44, and to a lesser extent, CYP3A25 of mouse origin; CYP3A1, CYP3A3, CYP3A23, and to a lesser extent, CYP3A18 of rat origin; and CYP3A5, CYP3A7, and to a lesser extent, CYP3A3 and CYP3A4 of 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).

CYP3A (L-14) is also recommended for detection of CYP3A5, CYP3A7, and to a lesser extent, CYP3A3 and CYP3A4 in additional species, including canine.

Molecular Weight of CYP3A: 52-55 kDa.

Positive Controls: CYP3A (m): 293T Lysate: sc-119596, LNCaP cell lysate: sc-2231 or mouse liver extract: sc-2255.

**RECOMMENDED SECONDARY REAGENTS**

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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-2033 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

**DATA**

**SELECT PRODUCT CITATIONS**


**RESEARCH USE**

For research use only, not for use in diagnostic procedures.

**MONOSATISFACTION GUARANTEED**

Try CYP3A (B-3): sc-365415 or CYP3A (H-10): sc-390788, our highly recommended monoclonal alternatives to CYP3A (L-14).