

Basic Information

Product Name	Anti-CYP2A6 Antibody
Gene Name	CYP2A6
Source	Rabbit
Clonality	Polyclonal
Isotype	IgG
Species Reactivity	human, mouse, rat
Tested Application	WB
Contents	500 ug/ml antibody with PBS, 0.02% NaN ₃ , 1 mg/ml BSA and 50% glycerol.
Immunogen	A synthetic peptide corresponding to a sequence at the N-terminus of human Cytochrome P450 2A6/CYP2A6.
Concentration	500 ug/ml
Purification	Immunogen affinity purified.
Observed MW	57 kDa
Dilution Ratios	Western blot (WB):1:500-2000

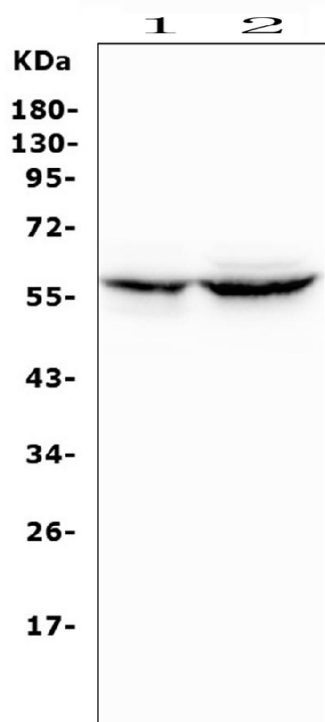
Storage

12 months from date of receipt, -20°C as supplied.

Background Information

Cytochrome P450 2A6 (abbreviated°CYP2A6) is a member of the°Cytochrome P450 mixed-function oxidase system, which is involved in the metabolism of xenobiotics in the body. CYP2A6 is the primary enzyme responsible for the oxidation of nicotine and°Cotinine. It is also involved in the metabolism of several pharmaceuticals, carcinogens, and a number of coumarin-type alkaloids. CYP2A6 is the only enzyme in the human body that appreciably catalyzes the 7-hydroxylation of°Coumarin, such that the formation of the product of this reaction, 7-hydroxycoumarin, is used as a probe for CYP2A6 activity. The CYP2A6 gene is part of a large cluster of cytochrome P450 genes from the CYP2A, CYP2B and CYP2F subfamilies on chromosome 19q. The gene was formerly referred to as CYP2A3; however, it has been renamed CYP2A6.

Selected Validation Data



Western blot analysis of CYP2A6 using anti-CYP2A6 antibody (A00947-2). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: rat RH35 whole cell lysates,

Lane 2: mouse HEPA1-6 whole cell lysates.

After electrophoresis, proteins were transferred to a membrane.

Then the membrane was incubated with rabbit anti-CYP2A6 antigen affinity purified polyclonal antibody (A00947-2) at a dilution of 1:1000 and probed with a goat anti-rabbit IgG-HRP secondary antibody (Catalog # BA1054). The signal is developed using ECL Plus Western Blotting Substrate (Catalog # AR1197). A specific band was detected for CYP2A6 at approximately 57 kDa. The expected band size for CYP2A6 is at 57 kDa.