SunLong Biotech Co.,LTD
Tel: 0086-571-56623320 Fax:0086-571-56623318
E-mail:sales@sunlongbiotech.com
www.sunlongbiotech.com

[Marker Primary Antibody]

Rabbit Anti-CYP46/HRP Conjugated antibody

Catalog Number: SL5046R-HRP

FOR RESEARCH USE ONLY

[DATASHEET]

Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Target:	Anti-CYP46/HRP
Immunogen:	KLH conjugated synthetic peptide derived from human CYP46
Purification:	affinity purified by Protein A
Concentration:	1mg/ml
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 1M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
Applications:	IHC-P=1:100-500 IHC-F=1:100-500 not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Reactivity:	Mouse(predicted:Human,Rat,Dog,Cow,Horse,Rabbit,Sheep)
Background:	background: The Cyp46 gene encodes a member of the cytochrome P450 superfamily of enzymes. The cytochrome P450 proteins are monooxygenases which catalyze many reactions involved in drug metabolism and synthesis of cholesterol, steroids and other lipids. This endoplasmic reticulum protein is expressed exclusively in the brain, where it converts cholesterol to 24S-hydroxycholesterol by adding a hydroxyl group to cholesterol, producing a product that is more soluble than cholesterol and able to be exported from the brain. Cyp46 is also known as 24S-cholesterol hydroxylase. **Function:** Involved in the turnover of cholesterol. It converts cholesterol into 24S-hydroxycholesterol and, to a lesser extent, 25-hydroxycholesterol. Has also activity with xenobiotic compounds, such as clotrimazole. **Subcellular Location:** Endoplasmic reticulum membrane; Single-pass membrane protein. Microsome membrane; Single-pass membrane protein.

Important Note: This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

SunLong Biotech Co.,LTD
Tel: 0086-571-56623320 Fax:0086-571-56623318
E-mail:sales@sunlongbiotech.com
www.sunlongbiotech.com

	Tissue Specificity: Expressed in brain. The mRNA was broadly distributed with higher levels in gray matter zones and lower levels in regions rich in white matter. Not detected in fetal sample but its expression increases linearly with age. **Similarity:** Belongs to the cytochrome P450 family. **Database links:** **Entrez Gene:** 10858 Human **Entrez Gene:** 13116 Mouse **Entrez Gene:** 362782 Rat Omim: 604087 Human **SwissProt:** Q9Y6A2 Human **SwissProt:** Q9WVK8 Mouse **Unigene:** 25121 Human Important **Note:** This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications. Studies have found that individuals with mutations in both the CYP46 and APOE-4 genes have nearly a 10-fold higher risk of developing Alzheimer's disease than normal individuals. In particular, an enzyme whose production is controlled by the CYP46 protein can help the brain break down excess cholesterol, while the APOE-4 gene plays a role in cholesterol transport in the human body. This suggests that there may be some association between cholesterol and the accumulation of beta-amyloid protein, and that a deficiency of cholesterol in the human body may also be the "chief culprit" leading to Alzheimer's disease.