

Rabbit CYP27A1 Polyclonal Antibody | anti-CYP27A1 antibody

Anti-CYP27A1 Antibody

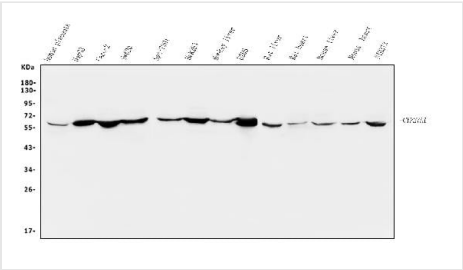
CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA125635	Rabbit	Human, Mouse, Rat, Monkey	ELISA, Immunofluorescence, Immunocytochemistry, Western Blot

PRODUCT SYNONYMS

CYP27A1; Polyclonal Antibody; Anti-CYP27A1 Antibody; Sterol 26-hydroxylase; mitochondrial; 5-beta-cholestane-3-alpha; 7-alpha; 12-alpha-triol 26-hydroxylase; Cytochrome P-450C27/25; Cytochrome P450 27; Sterol 27-hydroxylase; Vitamin D(3 25-hydroxylase; CYP27; cytochrome P450 family 27 subfamily A member 1; anti-CYP27A1 antibody

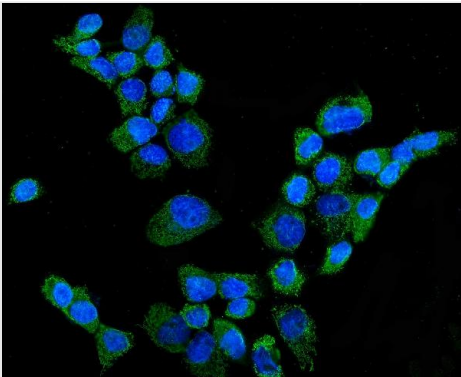
PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat, Monkey
Clonality	Polyclonal
Isotype	Rabbit IgG
Specificity	Rabbit IgG polyclonal antibody for CYP27A1 detection.
Purity/Purification	Immunogen affinity purified.
Form/Format	Lyophilized. Each vial contains 4mg Trehalose, 0.9mg NaCl, 0.2mg Na2HPO4, 0.01mg NaN3.
Applicable Applications for anti-CYP27A1 antibody	ELISA (Direct ELISA), IF (Immunofluorescence), ICC (Immunocytochemistry), WB (Western Blot)
Immunogen	E Coli-derived human CYP27A1 recombinant protein (Position: A7-C531).
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.
Recommended Detection Systems	Recommended Detection Systems
Preparation and Storage	Store at -20 degree C for one year. After reconstitution, at 4 degree C for one month. It can also be aliquotted and stored frozen at -20 degree C for a longer time. Avoid repeated freezing and thawing.



WB (Western Blot)

Figure 2. Western blot analysis of CYP27A1 using anti-CYP27A1 antibody (AAA125635). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions. Lane 1: human placenta tissue lysates Lane 2: human HEPG2 whole cell lysates Lane 3: human CACO-2 whole cell lysates Lane 4: human SW620 whole cell lysates Lane 5: human SGC-7901 whole cell lysates Lane 6: human HEK293 whole cell lysates Lane 7: monkey liver tissue lysates Lane 8: human U2OS whole cell lysates Lane 9: rat liver tissue lysates Lane 10: rat heart tissue lysates Lane 11: mouse liver tissue lysates Lane 12: mouse heart tissue lysates Lane 13: mouse NIH/3T3 whole cell lysates. After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-CYP27A1 antigen affinity purified polyclonal antibody (Catalog # AAA125635) at 0.25 μg/mL overnight at 4 degree C, then washed with TBS-0.1% Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:5000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for CYP27A1 at approximately 60KD. The expected band size for CYP27A1 is at 60KD.



IF (Immunofluorescence)

Figure 1. IF analysis of CYP27A1 using anti-CYP27A1 antibody (AAA125635). CYP27A1 was detected in immunocytochemical section of A431 cells. Enzyme antigen retrieval was performed using IHC enzyme antigen retrieval reagent for 15 mins. The cells were blocked with 10% goat serum. And then incubated with 5 μg/mL rabbit anti-CYP27A1 Antibody (AAA125635) overnight at 4 degree C. DyLight 488 Conjugated Goat Anti-Rabbit IgG was used as secondary antibody at 1:100 dilution and incubated for 30 minutes at 37 degree C. The section was counterstained with DAPI. Visualize using a fluorescence microscope and filter sets appropriate for the label used.

ADDITIONAL INFORMATION

Related Product Information for anti-CYP27A1 antibody	CYP27A1 is a gene encoding a cytochrome P450 oxidase, and is commonly known as sterol 27-hydroxylase. It is mapped to 2q35. This 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 mitochondrial protein oxidizes cholesterol intermediates as part of the bile synthesis pathway. Since the conversion of cholesterol to bile acids is the major route for removing cholesterol from the body, this protein is important for overall cholesterol homeostasis. Mutations in this gene cause cerebrotendinous xanthomatosis, a rare autosomal recessive lipid storage disease.
References	1. Guyant-Marechal, L., Verrips, A., Girard, C., Wevers, R. A., Zijlstra, F., Sistermans, E., Vera, P., Campion, D., Hannequin, D. Unusual cerebrotendinous xanthomatosis with fronto-temporal dementia phenotype. <i>Am. J. Med. Genet.</i> 139A: 114-117, 2005. 2. Lamon-Fava, S., Schaefer, E. J., Garuti, R., Salen, G., Calandra, S. Two novel mutations in the sterol 27-hydroxylase gene causing cerebrotendinous xanthomatosis. <i>Clin. Genet.</i> 61: 185-191, 2002.

NCBI AND UNIPROT INFORMATION

NCBI GI #	4503211
NCBI GeneID	1593
NCBI Accession #	NP_000775.1
NCBI GenBank Nucleotide #	NM_000784.3
UniProt Accession #	Q02318 ; Q6LDB4 ; Q86YQ6 ; A8K303
Molecular Weight	60,235 Da
NCBI Official Full Name	sterol 26-hydroxylase, mitochondrial
NCBI Official Synonym Full Names	cytochrome P450, family 27, subfamily A, polypeptide 1
NCBI Official Symbol	CYP27A1

NCBI Official Synonym Symbols	CTX; CP27; CYP27
NCBI Protein Information	sterol 26-hydroxylase, mitochondrial; cytochrome P450 27; sterol 27-hydroxylase; cytochrome P-450C27/25; vitamin D(3) 25-hydroxylase; cholestanetriol 26-monooxygenase; 5-beta-cholestane-3-alpha,7-alpha,12-alpha-triol 27-hydroxylase; 5-beta-cholestane-3-al
UniProt Protein Name	Sterol 26-hydroxylase, mitochondrial
UniProt Gene Name	CYP27A1
UniProt Synonym Gene Names	CYP27
UniProt Entry Name	CP27A_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/cyp27a1-antibody-direct-elisa-immunofluorescence-immunocytochemistry-western-blot-elisa/125635>