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**Product Name: CYP27A1 Rabbit Polyclonal Antibody****Catalog #: APRab09643**

For research use only.

**Summary**

|                      |   |
|----------------------|---|
| <b>Description</b>   | Rabbit polyclonal Antibody  |
| <b>Host</b>          | Rabbit  |
| <b>Application</b>   | WB,IHC,ICC/IF,ELISA   |
| <b>Reactivity</b>    | Human,Rat,Mouse   |
| <b>Conjugation</b>   | Unconjugated  |
| <b>Modification</b>  | Unmodified  |
| <b>Isotype</b>       | IgG   |
| <b>Clonality</b>     | Polyclonal  |
| <b>Form</b>          | Liquid  |
| <b>Concentration</b> | 1mg/ml  |
| <b>Storage</b>       | Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.                       |
| <b>Shipping</b>      | Ice bags  |
| <b>Buffer</b>        | Liquid in PBS containing 50% glycerol, 0.5% protective protein and 0.02% New type preservative N. |
| <b>Purification</b>  | Affinity purification   |

**Application**

|                         |  |
|-------------------------|--|
| <b>Dilution Ratio</b>   | WB 1:500-1:2000,IHC 1:100-1:300,ICC/IF 1:200-1:1000,ELISA 1:5000-1:20000 |
| <b>Molecular Weight</b> | 60kDa  |

**Antigen Information**

|                          |   |
|--------------------------|---|
| <b>Gene Name</b>         | CYP27A1   |
| <b>Alternative Names</b> | CYP27A1; CYP27; Sterol 26-hydroxylase; mitochondrial; 5-beta-cholestane-3-alpha,7-alpha,12-alpha-triol 27-hydroxylase; Cytochrome P-450C27/25; Cytochrome P450 27; Sterol 27-hydroxylase; Vitamin D(3) 25-hydroxylase |
| <b>Gene ID</b>           | 1593.0  |
| <b>SwissProt ID</b>      | Q02318  |
| <b>Immunogen</b>         | The antiserum was produced against synthesized peptide derived from human Cytochrome P450 27A1. AA range:101-150  |

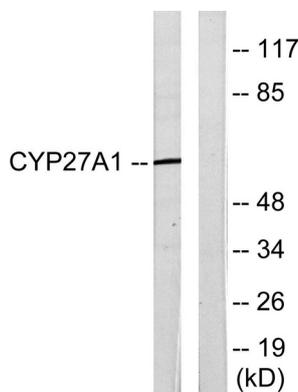
## Background

cytochrome P450 family 27 subfamily A member 1(CYP27A1) Homo sapiens 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. [provided by RefSeq, Jul 2008],catalytic activity:5-beta-cholestane-3-alpha,7-alpha,12-alpha-triol + NADPH + O(2) = (25R)-5-beta-cholestane-3-alpha,7-alpha,12-alpha,26-tetraol + NADP(+) + H(2)O.,cofactor:Heme group.,disease:Defects in CYP27A1 are the cause of cerebrotendinous xanthomatosis (CTX) [MIM:213700]. CTX is a rare sterol storage disorder characterized clinically by progressive neurologic dysfunction, premature atherosclerosis, and cataracts.,function:Catalyzes the first step in the oxidation of the side chain of sterol intermediates; the 27-hydroxylation of 5-beta-cholestane-3-alpha,7-alpha,12-alpha-triol. Has also a vitamin D3-25-hydroxylase activity.,pathway:Hormone biosynthesis; cholecalciferol biosynthesis.,similarity:Belongs to the cytochrome P450 family.,

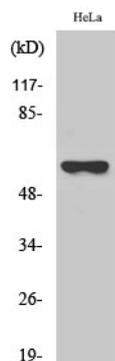
## Research Area

Primary bile acid biosynthesis;PPAR;

## Image Data



Western blot analysis of lysates from HeLa cells, using Cytochrome P450 27A1 Antibody. The lane on the right is blocked with the synthesized peptide.



Western Blot analysis of various cells using CYP27A1 Polyclonal Antibody diluted at 1: 1000

