

Product datasheet for **AP06771PU-N**

Cytochrome P450 17A1 (CYP17A1) Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	IF, IHC, WB
Recommended Dilution:	Western blot: 1/500-1/1000. Immunofluorescence: 1/50-1/200. Immunohistochemistry on paraffin sections: 1/50-1/200.
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Immunogen:	Synthetic peptide, corresponding to amino acids 211-260 of Human CYP17A1.
Specificity:	The antibody detects endogenous levels of CYP17A1 protein. (region surrounding asn249)
Formulation:	Phosphate buffered saline (PBS), pH~7.2 State: Aff - Purified State: Liquid purified Ig fraction (> 95% pure by SDS-PAGE). Preservative: 0.05% Sodium Azide
Concentration:	1.0 mg/ml
Purification:	Affinity Chromatography using epitope-specific immunogen.
Conjugation:	Unconjugated
Storage:	Store undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
Predicted Protein Size:	~ 57 kDa
Gene Name:	Homo sapiens cytochrome P450 family 17 subfamily A member 1 (CYP17A1)
Database Link:	Entrez Gene 1586 Human P05093



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Background:

The cytochrome P450 proteins are monooxygenases that catalyze many reactions involved in drug metabolism and synthesis of cholesterol, steroids and other lipids. P450 enzymes are classified into subfamilies, such as CYP1A, CYP2A, CYP2C, CYP2D, CYP4A14, CYP7A, CYP7B, CYP8B, CYP11A, CYP17A1, CYP19 and CYP27A, based on sequence similarities. CYP17A (17 α -hydroxylase/17,20-lyase) is important for the conversion of pregnenolone and progesterone to dehydroepiandrosterone (DHEA) and androstenedione. In this process, it catalyzes both the 17 α -hydroxylation and the 17,20-lyase reaction. CYP17A1 is crucial during sexual development, both during fetal development and during puberty, and is intracellularly regulated by cAMP levels. Defects in the CYP17A1 gene, which encodes for the protein, may cause adrenal hyperplasia type V (AH-V) which is characterized by hypokalemia and hypertension. Male patients affected by AH-V do not undergo normal sexual differentiation and develop female external genitalia and do not undergo pubertal development.

Synonyms:

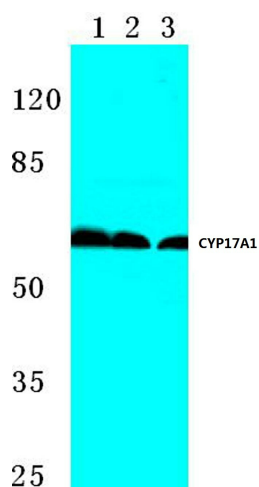
Cytochrome P450 17A1, CYPXVII, P450-C17, Steroid 17-alpha-monooxygenase, CYP17, S17AH, P450c17

Protein Families:

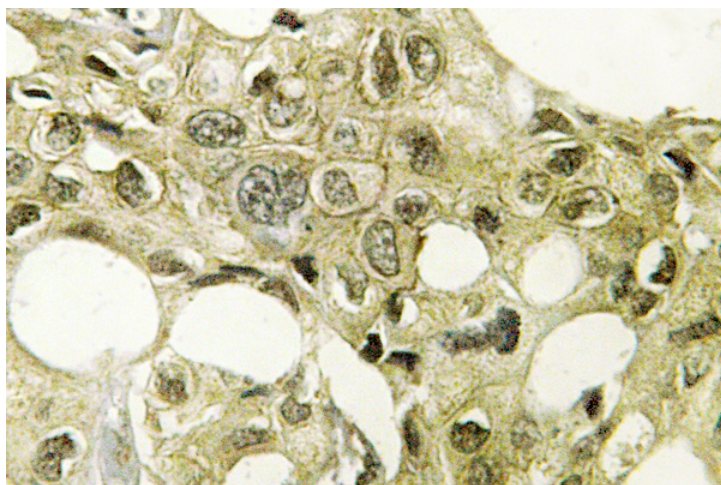
Druggable Genome, P450

Protein Pathways:

C21-Steroid hormone metabolism, Metabolic pathways

Product images:

Western blot (WB) analysis of CYP17A1 antibody at 1/500 dilution. Lane 1: Hela whole cell lysate, Lane 2: NIH-3T3 whole cell lysate, Lane 3: H9C2 whole cell lysate.



Immunohistochemistry (IHC) analyzes of CYP17A1 antibody in paraffin-embedded human breast carcinoma tissue.