

CYP11B1/2 Polyclonal Antibody
Catalog # AP73407**Specification****CYP11B1/2 Polyclonal Antibody - Product Information**

Application	WB
Primary Accession	P15538
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal

CYP11B1/2 Polyclonal Antibody - Additional Information

Gene ID 1584

Other Names

CYP11B1; S11BH; Cytochrome P450 11B1, mitochondrial; CYPXIB1; Cytochrome P-450c11; Cytochrome P450C11; Steroid 11-beta-hydroxylase; CYP11B2; Cytochrome P450 11B2, mitochondrial; Aldosterone synthase; ALDOS; Aldosterone-synthesizing enzyme; CYPXIB2; Cytochrome P-450Aldo; Cytochrome P-450C18; Steroid 18-hydroxylase

Dilution

WB~~Western Blot: 1/500 - 1/2000. ELISA: 1/20000. Not yet tested in other applications.

Format

Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.

Storage Conditions

-20°C

CYP11B1/2 Polyclonal Antibody - Protein Information**Name** CYP11B1 {ECO:0000303|PubMed:18215163, ECO:0000312|HGNC:HGNC:2591}**Function**

A cytochrome P450 monooxygenase involved in the biosynthesis of adrenal corticoids (PubMed:12530636, PubMed:1518866, PubMed:1775135, PubMed:18215163, PubMed:23322723). Catalyzes a variety of reactions that are essential for many species, including detoxification, defense, and the formation of endogenous chemicals like steroid hormones. Steroid 11beta, 18- and 19-hydroxylase with preferred regioselectivity at 11beta, then 18, and lastly 19 (By similarity). Catalyzes the hydroxylation of 11-deoxycortisol and 11-deoxycorticosterone (21- hydroxyprogesterone) at 11beta position, yielding cortisol or corticosterone, respectively, but cannot produce aldosterone (PubMed:12530636, PubMed:1518866),

PubMed:1775135, PubMed:18215163, PubMed:23322723). Mechanistically, uses molecular oxygen inserting one oxygen atom into a substrate for hydroxylation and reducing the second into a water molecule. Two electrons are provided by NADPH via a two- protein mitochondrial transfer system comprising flavoprotein FDXR (adrenodoxin/ferredoxin reductase) and nonheme iron-sulfur protein FDX1 or FDX2 (adrenodoxin/ferredoxin) (PubMed:18215163). Due to its lack of 18-oxidation activity, it is incapable of generating aldosterone (PubMed:23322723). Could also be involved in the androgen metabolic pathway (Probable).

Cellular Location

Mitochondrion inner membrane {ECO:0000250|UniProtKB:P14137}; Peripheral membrane protein {ECO:0000250|UniProtKB:P14137}

Tissue Location

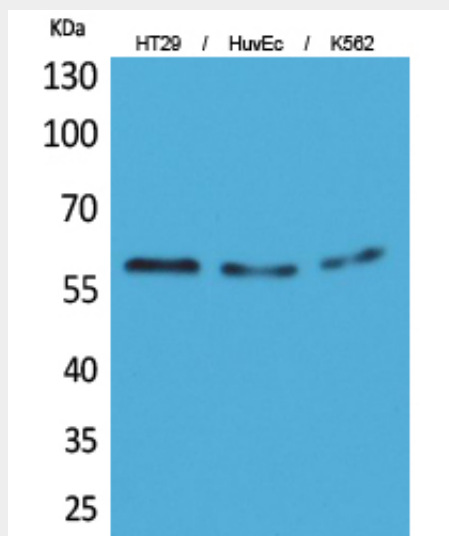
Expressed in the zona fasciculata/reticularis of the adrenal cortex.

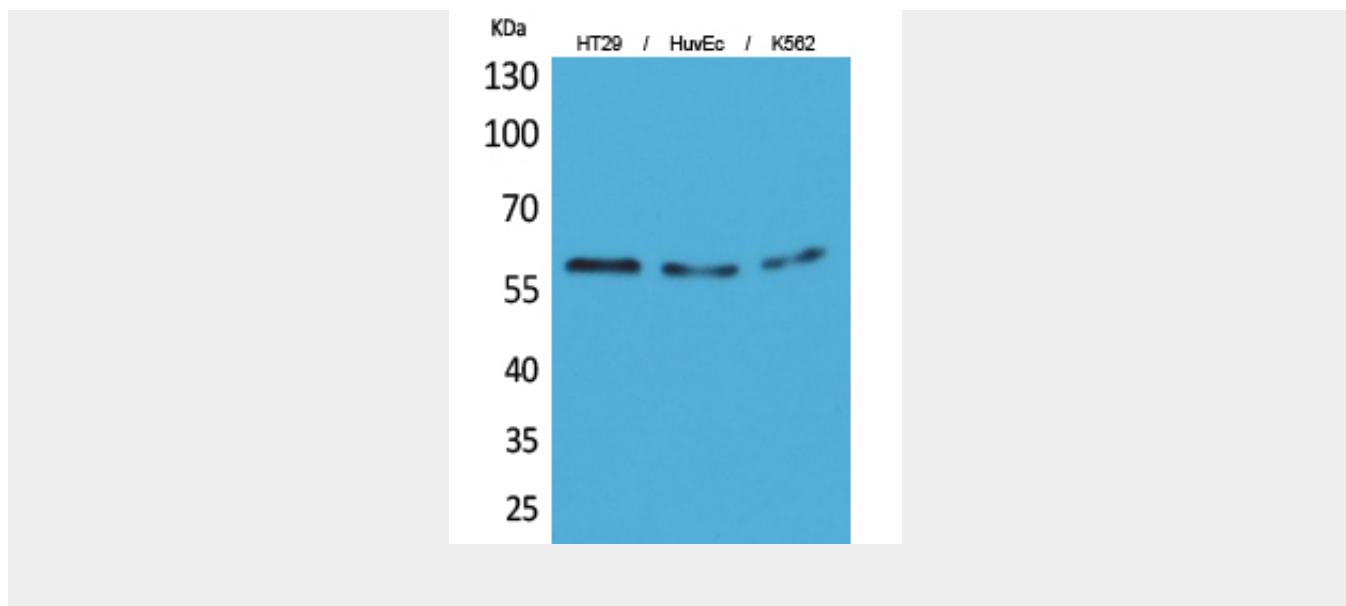
CYP11B1/2 Polyclonal Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

CYP11B1/2 Polyclonal Antibody - Images





CYP11B1/2 Polyclonal Antibody - Background

Has steroid 11-beta-hydroxylase activity. In addition to this activity, the 18 or 19-hydroxylation of steroids and the aromatization of androstendione to estrone have also been ascribed to cytochrome P450 XIB.