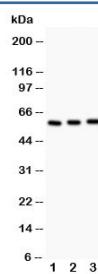


CYP11A1 Antibody (R30785)

Catalog No.	Formulation	Size
R30785	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

Availability	1-3 business days
Species Reactivity	Mouse, Rat
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity
Buffer	Lyophilized from 1X PBS with 2.5% BSA and 0.025% sodium azide/thimerosal
UniProt	Q9QZ82
Applications	Western Blot : 0.5-1ug/ml
Limitations	This CYP11A1 antibody is available for research use only.



Western blot testing of CYP11A1 antibody and Lane 1: rat testis; 2: mouse testis; 3: mouse brain; Expected molecular weight: 50-60 kDa.

Description

Cytochrome p450, family 11, subfamily A, polypeptide 1, also called P450SCC, P450C11A1 or CYP11A, is a mitochondrial enzyme associated with the conversion of cholesterol to pregnenolone. CYP11A1 is a member of the cytochrome P450 superfamily of enzymes. The CYP11A1 gene is mapped on 15q24.1. Expression of the CYP11A1 gene may play a role in skin physiology and pathology and that cutaneous proopiomelanocortin activity may be autoregulated by a feedback mechanism involving glucocorticoids synthesized locally by Slominski et al. Using in vitro studies, CYP11A1 catalyzed the side-chain cleavage of 7-dehydrocholesterol to form 7-dehydropregnenolone. In addition, CYP11A1 catalyzed the metabolism of biologically inert vitamin D3, which is formed from 7-dehydrocholesterol, to form 2

hydroxylated products, 20-hydroxyvitamin D3 and 20, 22-dihydroxyvitamin D3. Mutations in the CYP11A1 gene cause congenital adrenal insufficiency with partial or complete 46, XY sex reversal.

Application Notes

The stated application concentrations are suggested starting amounts. Titration of the CYP11A1 antibody may be required due to differences in protocols and secondary/substrate sensitivity.

Immunogen

An amino acid sequence from the N-terminus of mouse CYP11A1 (DNGWLNLHYFWRES) was used as the immunogen for this CYP11A1 antibody.

Storage

After reconstitution, the CYP11A1 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.