CYP19A1 Antibody / Aromatase (RQ4643)

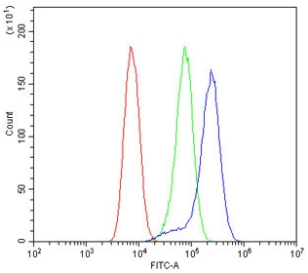
Catalog No.	Formulation	Size
RQ4643	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

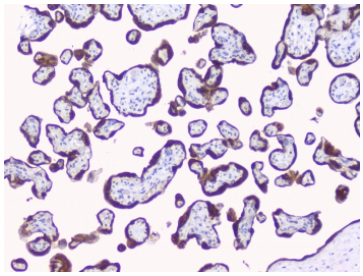
Availability	1-3 business days
Species Reactivity	Human, Mouse, Rat
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity purified
Buffer	Lyophilized from 1X PBS with 2% Trehalose and 0.025% sodium azide
UniProt	P11511
Applications	Western blot: 0.5-1ug/ml Immunohistochemistry: 1-2ug/ml Flow cytometry: 1-3ug/10^6 cells Direct ELISA: 0.1-0.5ug/ml (human recombinant protein)
Limitations	This CYP19A1 antibody is available for research use only.



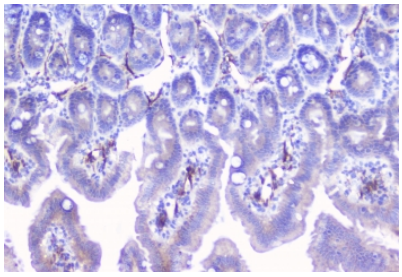
Western blot testing of human placenta lysate with CYP19A1 antibody at 0.5ug/ml. Predicted molecular weight ~58 kDa.



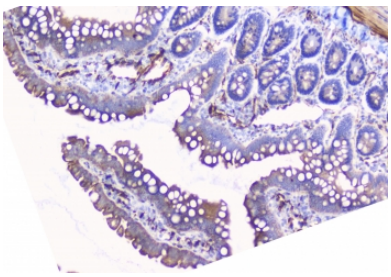
Flow cytometry testing of human U-2 OS cells with CYP19A1 antibody at 1ug/10^6 cells (blocked with goat sera); Red=cells alone, Green=isotype control, Blue= CYP19A1 antibody.



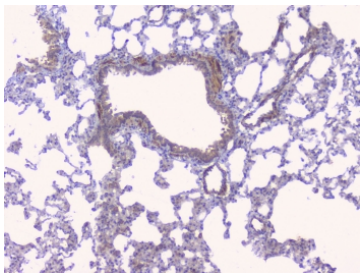
IHC staining of FFPE human placenta with CYP19A1 antibody. HIER: boil tissue sections in pH6, 10mM citrate buffer, for 10-20 min and allow to cool before testing.



IHC staining of FFPE mouse small intestine with CYP19A1 antibody. HIER: boil tissue sections in pH6, 10mM citrate buffer, for 10-20 min and allow to cool before testing.



IHC staining of FFPE rat small intestine with CYP19A1 antibody. HIER: boil tissue sections in pH6, 10mM citrate buffer, for 10-20 min and allow to cool before testing.



IHC staining of FFPE rat lung with CYP19A1 antibody. HIER: boil tissue sections in pH6, 10mM citrate buffer, for 10-20 min and allow to cool before testing.

Description

CYP19A1, also called Aromatase, is an enzyme responsible for a key step in the biosynthesis of estrogens. It is a member of the cytochrome P450 superfamily, which are monooxygenases that catalyze many reactions involved in steroidogenesis. In particular, aromatase is responsible for the aromatization of androgens into estrogens. The CYP19 gene spans at least 70 kb of genomic DNA and contains 10 exons. By in situ hybridization, the ARO gene is mapped to 15q21.1. The aromatase enzyme can be found in many tissues including gonads, brain, adipose tissue, placenta, blood vessels, skin, bone, and endometrium, as well as in tissue of endometriosis, uterine fibroids, breast cancer, and endometrial cancer. It is an important factor in sexual development. Some bodybuilders taking steroids also take antiaromatase supplements to prevent excess testosterone conversion into estrogens, which can cause gynecomastia.

Application Notes

Optimal dilution of the CYP19A1 antibody should be determined by the researcher.

Immunogen

Amino acids Y241-H503 from the human protein were used as the immunogen for the CYP19A1 antibody.

Storage

After reconstitution, the CYP19A1 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.

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