

Anti-Aromatase/Cyp19a1 Antibody Picoband®

Catalog Number: A00071-2

About Cyp19a1

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.

Overview

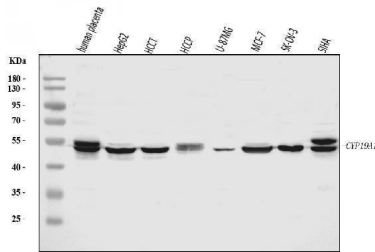
Product Name	Anti-Aromatase/Cyp19a1 Antibody Picoband®
Reactive Species	Human, Mouse, Rat
Description	Boster Bio Anti-Aromatase/Cyp19a1 Antibody Picoband® catalog # A00071-2. Tested in ELISA, WB applications. This antibody reacts with Human, Mouse, Rat. The brand Picoband indicates this is a premium antibody that guarantees superior quality, high affinity, and strong signals with minimal background in Western blot applications. Only our best-performing antibodies are designated as Picoband, ensuring unmatched performance.
Application	ELISA, WB
Clonality	Polyclonal
Formulation	Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na ₂ HPO ₄ .
Storage Instructions	At -20°C for one year from date of receipt. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for six months. Avoid repeated freezing and thawing.
Host	Rabbit
Uniprot ID	P28649

Technical Details

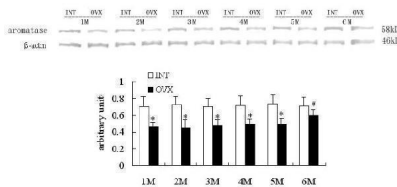
Immunogen	E.coli-derived mouse Aromatase/Cyp19a1 recombinant protein (Position: N75-Q428).
Recommended Detection Systems	Boster recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG (EK1002) for Western blot.
Cross Reactivity	No cross-reactivity with other proteins.
Isotype	Rabbit IgG

Form	Lyophilized
Concentration	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml.
Purification	Immunogen affinity purified.
Suggested Dilutions	Western blot, 0.25-0.5 ug/ml, Human, Mouse, Rat ELISA, 0.1-0.5 ug/ml, -

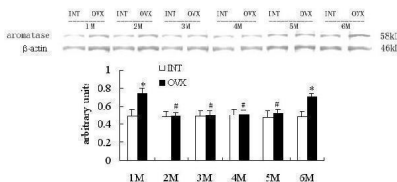
Anti-Aromatase/Cyp19a1 Antibody Picoband® (A00071-2) Images



Western blot analysis of Aromatase/Cyp19a1 using anti-Aromatase/Cyp19a1 antibody (A00071-2). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions. Lane 1: human placenta tissue lysates, Lane 2: human HepG2 whole cell lysates, Lane 3: human HCCT tissue lysates, Lane 4: human HCCP tissue lysates, Lane 5: human U-87MG whole cell lysates, Lane 6: human MCF-7 whole cell lysates, Lane 7: human SK-OV-3 whole cell lysates, Lane 8: human SiHa whole cell lysates. After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-Aromatase/Cyp19a1 antigen affinity purified polyclonal antibody (Catalog # A00071-2) at 0.5 ug/mL overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:5000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for Aromatase/Cyp19a1 at approximately 49-58 kDa. The expected band size for Aromatase/Cyp19a1 is at 58 kDa.

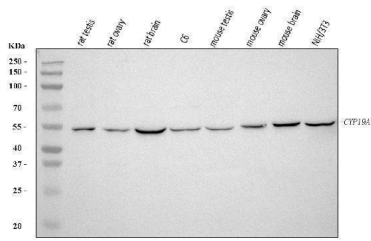


Western blot analysis of liver P450arom expressions of the rats. The upper picture shows the Western blot analysis of the liver aromatase P450. Densitometric analysis of the protein concentration using aromatase/beta-actin expressed as the mean with SEM bar in each column indicated in the lower panel. * p < 0.05 vs corresponding intact controls, # p < 0.05 vs OVX1M. Index in PubMed under a CC BY license. PMID: 15661083



Western blot analysis of SA adipose P450arom expressions of the rats. The upper picture shows the Western blot analysis of the SA adipose aromatase P450. Densitometric analysis of the protein concentration using aromatase/beta-actin expressed as the mean with SEM bar in each column indicated in the lower panel. * p < 0.05 vs corresponding intact controls, # p < 0.05 vs OVX1M. Index in PubMed under a CC BY license. PMID: 15661083

Western blot analysis of Aromatase/Cyp19a1 using anti-Aromatase/Cyp19a1 antibody (A00071-2). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions. Lane 1: rat testis tissue lysates, Lane 2: rat ovary tissue lysates, Lane 3: rat brain tissue lysates, Lane 4: rat C6 whole cell lysates, Lane 5: mouse testis tissue lysates, Lane



6: mouse ovary tissue lysates, Lane 7: mouse brain tissue lysates, Lane 8: mouse NIH/3T3 whole cell lysates. After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-Aromatase/Cyp19a1 antigen affinity purified polyclonal antibody (Catalog # A00071-2) at 0.5 ug/mL overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:5000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for Aromatase/Cyp19a1 at approximately 49-58 kDa. The expected band size for Aromatase/Cyp19a1 is at 58 kDa.

2 Publications Citing This Product

1. PubMed ID: 10.1186/1477-7827-3-6, Extragonadal aromatization increases with time after ovariectomy in rats
2. PubMed ID: 10.1016/j.brainres.2005.01.004, Electroacupuncture stimulates hypothalamic aromatization

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Anti-Aromatase/Cyp19a1 Antibody

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