

Basic Information

Product Name	Anti-HSD17B1 Antibody
Gene Name	HSD17B1
Source	Rabbit
Clonality	Polyclonal
Isotype	IgG
Species Reactivity	mouse, rat
Tested Application	WB
Contents	500 ug/ml antibody with PBS, 0.02% NaN ₃ , 1 mg/ml BSA and 50% glycerol.
Immunogen	A synthetic peptide corresponding to a sequence in the middle region of rat HSD17B1, different from the related mouse sequence by one amino acid.
Concentration	500 ug/ml
Purification	Immunogen affinity purified.
Observed MW	37 kDa
Dilution Ratios	Western blot (WB):1:500-2000

Storage

12 months from date of receipt, -20°C as supplied.

Background Information

HSD17B1(17-BETA-HYDROXYSTEROID DEHYDROGENASE I), also known as 17-beta-hydroxysteroid dehydrogenase or 17-ketosteroid reductase, is an enzyme that is responsible for the interconversion of estrone(E1) and estradiol(E2) as well as the interconversion of androstenedione and testosterone. Its cytogenetic location is 17q21.2. HSD17B1 gene expression is detected in 34 of 42(81%) adenomas in all tumor subtypes; HSD17B2 mRNA is detected in 18 of 42(43%) adenomas but not in prolactinomas. Human estrogenic HSD17B1 is an NADP(H)-preferring enzyme. It possesses 11- and 4-fold higher specificity toward NADP(H) over NAD(H) for oxidation and reduction, respectively, as demonstrated by kinetic studies. All 4 HSD17B isoforms are variably expressed in human anterior pituitary adenomas, which also show HSD17B enzyme activity, suggesting that HSD17B may play an important role in regulating the local cellular levels of estradiol.

Selected Validation Data



100KD —
70KD —
55KD —
35KD —
25KD —
15KD —

Western blot analysis of HSD17B1 using anti-HSD17B1 antibody (BA4378-2). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: rat liver tissue lysates.

After electrophoresis, proteins were transferred to a membrane. Then the membrane was incubated with rabbit anti-HSD17B1 antigen affinity purified polyclonal antibody (BA4378-2) at a dilution of 1:1000 and probed with a goat anti-rabbit IgG-HRP secondary antibody (Catalog # BA1054). The signal is developed using ECL Plus Western Blotting Substrate (Catalog # AR1197). A specific band was detected for HSD17B1 at approximately 37 kDa. The expected band size for HSD17B1 is at 37 kDa.