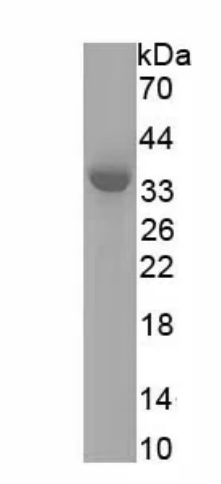
Active 17-Beta-Hydroxysteroid Dehydrogenase Type 1 (HSD17b1)

Catalog#:PEH12948

概述（Summary）

别称（Alternative Names）	EDH17B2; EDHB17; HSD17; SDR28C1; Estradiol 17-Beta-Dehydrogenase 1; Short Chain Dehydrogenase/Reductase Family 28CE,1; 20 alpha-hydroxysteroid dehydrogenase
纯度（Purity）	Greater than 90% as determined by reducing SDS-PAGE.
内毒素（Endotoxin level）	Please contact with the lab for this information
蛋白构建（Construction）	【Thr4-Pro289】
Accession #	P14061
表达宿主（Host）	E.coli
种属（Species）	Homo sapiens (Human)
预测分子量（Predicted MW）	34.8 kDa
制剂（Form）	Lyophilized from a 0.2 μm filtered solution of PBS, pH7.4, containing 0.01% SKL, 1mM DTT, 5% Trehalose and Proclin300.
运输方式（Shipping）	The product is shipped with ice bag. Upon receipt, store it immediately at the temperature listed below.
稳定性&储存（Stability &Storage）	12 months at -20°C to -80°C in lyophilized state.6 months at -20°C to -80°C under sterile conditions after reconstitution.7-10 days at 2°C to 8°C under sterile conditions after reconstitution.Please minimize freeze-thaw cycles.
复溶（Reconstitution）	Reconstitute in 10mM PBS (pH7.4) to a concentration of 0.1-1.0 mg/mL. Do not vortex.
背景介绍（References）	Favors the reduction of estrogens and androgens. Converts estrone (E1) to a more potent estrogen, 17beta-estradiol (E2). Also has 20-alpha-HSD activity. Uses preferentially NADH.

电泳图（SDS-PAGE image）



Greater than 90% as determined by reducing SDS-PAGE.

活性图（Bioactivity image）

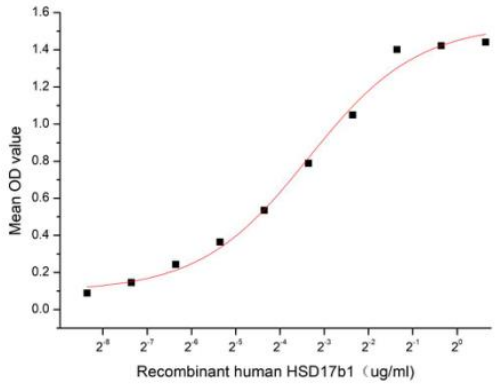


Figure 1. The binding activity of recombinant human HSD17b1 and recombinant human CYP1B1

Hydroxysteroid (17β) dehydrogenase 1 (HSD17b1) is a steroidogenic enzyme that especially catalyzes the conversion of low potent 17keto-steroids to highly potent 17β-hydroxysteroids. It has a dual function in estrogen activation and androgen inactivation and plays a major role in establishing the estrogen E2 concentration gradient between serum and peripheral tissues. Cytochrome P450 1B1 is involved in the metabolism of various endogenous substrates, including fatty acids, steroid hormones and vitamins. Thus a binding ELISA assay was conducted to detect the interaction of recombinant human HSD17b1 and recombinant human CYP1B1. Briefly, HSD17b1 were diluted serially in PBS, with 0.01% BSA (pH 7.4). Duplicate samples of 100 ul were then transferred to CYP1B1-coated microtiter wells and incubated for 2h at 37℃. Wells were washed with PBST and incubated for 1h with anti-HSD17B1 pAb, then aspirated and washed 3 times. After incubation with HRP labelled secondary antibody, wells were aspirated and washed 3 times. With the addition of substrate solution , wells were incubated 15-25 minutes at 37℃. Finally, add 50 µL stop solution to the wells and read at 450 nm immediately. The binding activity of recombinant human HSD17b1 and recombinant human CYP1B1 was shown in Figure 1, the EC50 for this effect is 0.098 ug/mL.

注意事项（Note）

For Research Use Only , Not for Diagnostic Use.