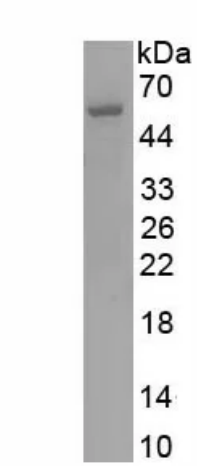
Active Steroid 5 Alpha Reductase 1 (SRD5a1)

Catalog#:PEM13002

概述（Summary）

别称（Alternative Names）	3-Oxo-5 Alpha-Steroid Delta 4-Dehydrogenase Alpha 1
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）	【Met1-Leu255】
Accession #	Q68FF9
表达宿主（Host）	E.coli
种属（Species）	Mus musculus (Mouse)
预测分子量（Predicted MW）	59.3 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）	Converts testosterone into 5-alpha-dihydrotestosterone and progesterone or corticosterone into their corresponding 5-alpha-3-oxosteroids. It plays a central role in sexual differentiation and androgen physiology.

电泳图（SDS-PAGE image）



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

活性图（Bioactivity image）

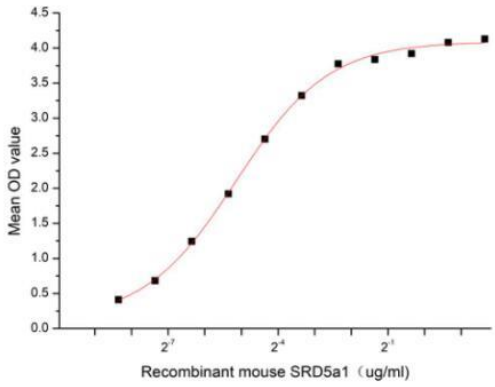


Figure 1. The binding activity of recombinant mouse SRD5a1 and recombinant human HSD17b3

Steroid 5 Alpha Reductase 1 (SRD5a1) a member of the steroid 5α-reductase family (SRD5A1, SRD5A2 and SRD5A3) converting testosterone into 5-alpha-dihydrotestosterone and progesterone or corticosterone into their corresponding 5-alpha-3-oxosteroids. It plays a central role in sexual differentiation and androgen physiology. SRD5A1 was mainly expressed in the skin, scalp, liver, and brain tissues. Prostatic Adenoma and Prostatic Hyperplasia are associated with SRD5A1. Besides, 17-Beta-Hydroxysteroid Dehydrogenase Type 3 (HSD17b3) has been identified as an interactor of SRD5a1, thus a functional binding ELISA assay was conducted to detect the interaction of recombinant mouse SRD5a1 and recombinant human HSD17b3. Briefly, biotin-linked SRD5a1 were diluted serially in PBS, with 0.01% BSA (pH 7.4). Duplicate samples of 100 µl were then transferred to HSD17b3-coated microtiter wells and incubated for 1h at 37℃. Wells were washed with PBST 3 times and incubation with Streptavidin-HRP for 30min, then wells were aspirated and washed 5 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 mouse SRD5a1 and recombinant human HSD17b3 was shown in Figure 1, the EC50 for this effect is 0.03 ug/mL.

注意事项（Note）

For Research Use Only , Not for Diagnostic Use.