

17 β -HSD8 (G-4): sc-515239

BACKGROUND

17 β -HSD8 (17 β hydroxysteroid dehydrogenase type 8) belongs to the 17 β -HSD family of proteins that regulate the availability of steroids within a tissue. 17 β -HSD8 converts active steroids to their inactive form through its oxidative activity. It is a key player in the inactivation of Estradiol and Testosterone. 17 β -HSD8 is predominantly expressed in placenta, endometrium and prostate but can also be found in liver, and pancreas, with lowest levels found in testis, ovary and kidney. It has been proposed that a reduction in the levels of 17 β -HSD8 may lead to abnormal elevations in the local level of sex steroids, which can lead to recessive renal cystic disease. It has also been suggested that low levels of 17 β -HSD proteins may result in an underdeveloped urogenital system.

REFERENCES

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- Kikuti, Y.Y., et al. 1997. Physical mapping 220 kb centromeric of the human MHC and DNA sequence analysis of the 43-kb segment including the RING1, HKE6, and HKE4 genes. *Genomics* 42: 422-435.
- Fomitcheva, J., et al. 1998. Characterization of Ke 6, a new 17 β -hydroxysteroid dehydrogenase, and its expression in gonadal tissues. *J. Biol. Chem.* 273: 22664-22671.
- Aziz, N., et al. 2001. Arrested testis development in the cpk mouse may be the result of abnormal steroid metabolism. *Mol. Cell. Endocrinol.* 171: 83-88.
- Ma, Y., et al. 2006. Molecular cloning of bovine FABGL gene and its effects on bovine bioeconomic traits. *Yi Chuan Xue Bao* 33: 1096-1104.

CHROMOSOMAL LOCATION

Genetic locus: HSD17B8 (human) mapping to 6p21.32; H2-Ke6 (mouse) mapping to 17 B1.

SOURCE

17 β -HSD8 (G-4) is a mouse monoclonal antibody raised against amino acids 1-261 representing full length 17 β -HSD8 of human origin.

PRODUCT

Each vial contains 200 μ g IgG_{2a} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

17 β -HSD8 (G-4) is available conjugated to agarose (sc-515239 AC), 500 μ g/0.25 ml agarose in 1 ml, for IP; to HRP (sc-515239 HRP), 200 μ g/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-515239 PE), fluorescein (sc-515239 FITC), Alexa Fluor[®] 488 (sc-515239 AF488), Alexa Fluor[®] 546 (sc-515239 AF546), Alexa Fluor[®] 594 (sc-515239 AF594) or Alexa Fluor[®] 647 (sc-515239 AF647), 200 μ g/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor[®] 680 (sc-515239 AF680) or Alexa Fluor[®] 790 (sc-515239 AF790), 200 μ g/ml, for Near-Infrared (NIR) WB, IF and FCM.

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APPLICATIONS

17 β -HSD8 (G-4) is recommended for detection of 17 β -HSD8 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for 17 β -HSD8 siRNA (h): sc-72400, 17 β -HSD8 siRNA (m): sc-72401, 17 β -HSD8 shRNA Plasmid (h): sc-72400-SH, 17 β -HSD8 shRNA Plasmid (m): sc-72401-SH, 17 β -HSD8 shRNA (h) Lentiviral Particles: sc-72400-V and 17 β -HSD8 shRNA (m) Lentiviral Particles: sc-72401-V.

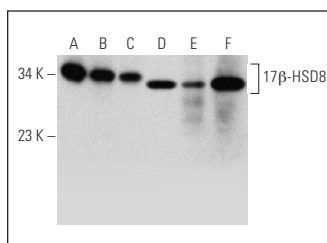
Molecular Weight of 17 β -HSD8: 27 kDa.

Positive Controls: JAR cell lysate: sc-2276, Hep G2 cell lysate: sc-2227 or human testis extract: sc-363781.

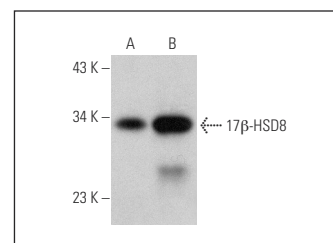
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker[™] Molecular Weight Standards: sc-2035, UltraCruz[®] Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgG κ BP-FITC: sc-516140 or m-IgG κ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz[®] Mounting Medium: sc-24941 or UltraCruz[®] Hard-set Mounting Medium: sc-359850.

DATA



17 β -HSD8 (G-4): sc-515239. Western blot analysis of 17 β -HSD8 expression in human testis (A), human placenta (B), human ovary (C), mouse testis (D), mouse placenta (E) and mouse ovary (F) tissue extracts.



17 β -HSD8 (G-4): sc-515239. Western blot analysis of 17 β -HSD8 expression in JAR (A) and Hep G2 (B) whole cell lysates.

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.