17β-HSD4 (A-6): sc-365167

**BACKGROUND**

17β-HSD4 (17β-hydroxysteroid dehydrogenase type 4) is also known as peroxisomal multifunctional enzyme/protein 2 (MFE-2/MFP-2), D-bifunctional enzyme or 17β Estradiol dehydrogenase type IV. It belongs to the 17β-HSD family of proteins that regulate the availability of steroids within various tissues throughout the body. 17β-HSD4 inactivates Estradiol through its oxidative activity but it is primarily involved in peroxisomal fatty acid and cholesterol β-oxidation. It has a multi-domain structure: the dehydrogenase domain is fused to a hydratase and a lipid transfer domain. 17β-HSD4 is a target protein of chromeceptin and it is essential for the downstream activation of Stat6. 17β-HSD4-deficient patients exhibit Zellweger-like syndrome and die within the first year of life. They display neuronal migration defects, facial dysmorphisms, severe hypotonia and convulsions in the neonatal period.

**REFERENCES**


**CHROMOSOMAL LOCATION**

Genetic locus: HSD17B4 (human) mapping to 5q23.1.

**SOURCE**

17β-HSD4 (A-6) is a mouse monoclonal antibody raised against amino acids 31-330 mapping within an internal region of 17β-HSD4 of human origin.

**PRODUCT**

Each vial contains 200 µg IgGκ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

17β-HSD4 (A-6) is available conjugated to agarose (sc-35167 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-35167 HRP), 200 µg/ml, for WB, H/CIP and ELISA; to either phycoerythin (sc-35167 PE), fluorescein (sc-35167 FITC), Alexa Fluor® 488 (sc-35167 AF488), Alexa Fluor® 546 (sc-35167 AF546), Alexa Fluor® 594 (sc-35167 AF594) or Alexa Fluor® 647 (sc-35167 AF647), 200 µg/ml, for WB (RGB), IF, H/CIP and FCM; and to either Alexa Fluor® 680 (sc-35167 AF680) or Alexa Fluor® 790 (sc-35167 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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**APPLICATIONS**

17β-HSD4 (A-6) is recommended for detection of 17β-HSD4 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg 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 1:30-1:300).

Suitable for use as control antibody for 17β-HSD4 shRNA (h): sc-61918, 17β-HSD4 shRNA Plasmid (h): sc-61918-SH and 17β-HSD4 shRNA (h) Lentiviral Particles: sc-61918-V.

Molecular Weight of 17β-HSD4: 81 kDa.

Positive Controls: K-562 whole cell lysate: sc-2203 or Jurkat whole cell lysate: sc-2204.

**RECOMMENDED SUPPORT REAGENTS**

To ensure optimal results, the following support reagents are recommended:
1) Western Blotting: use m-IgGκ BP-HP: sc-516102 or m-IgGκ BP-HP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-2048.
2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).

**DATA**

17β-HSD4 (A-6): sc-365167. Western blot analysis of 17β-HSD4 expression in K-562 (A) and Jurkat (B) whole cell lysates.

17β-HSD4 (A-6): sc-365167. Immunofluorescence staining of formalin-fixed Hep G2 cells showing cytoplasmic vesicle localization (A). Direct immunofluorescence staining of formalin-fixed HEK293 cells showing cytoplasmic vesicle localization and nuclear DAPI counterstain.

17β-HSD4 (A-6) antibody was conjugated to CruzFluor® 594 succinimidyl ester: sc-362619 (B).

**SELECT PRODUCT CITATIONS**


**STORAGE**

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