17β-HSD4 (H-300): sc-135045

**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 17-β 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 chromoepitax 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 dysmorphism, severe hypotonia and convulsions in the neonatal period.

**REFERENCES**


**PRODUCT**

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

**APPLICATIONS**

17β-HSD4 (H-300) is recommended for detection of 17β-HSD4 of mouse, rat and 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 1:30-1:3000).

17β-HSD4 (H-300) is also recommended for detection of 17β-HSD4 in additional species, including equine, canine and bovine.


Molecular Weight of 17β-HSD4: 81 kDa.

**RECOMMENDED SECONDARY REAGENTS**

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2035 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

**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 or our catalog for detailed protocols and support products.

Try 17β-HSD4 (A-6): sc-365167 or 17β-HSD4 (B-5): sc-271825, our highly recommended monoclonal alternatives to 17β-HSD4 (H-300).