**BACKGROUND**

17β-HSD12 (hydroxysteroid (17β) dehydrogenase 12), also known as KAR or SDR12C1, is a 312 amino acid multi-pass membrane protein that localizes to the endoplasmic reticulum and is a member of the short-chain dehydrogenases/reductases (SDR) family. Highly expressed in ovary and mammary glands, 17β-HSD12 catalyzes the transformation of estrone (E1) into estradiol (E2), suggesting a central role in estrogen formation. 17β-HSD12 may also play a role in long fatty acid elongation by reducing both long chain 3-ketoacyl-CoAs and long chain fatty acyl-CoAs. 17β-HSD12 is transcriptionally regulated by SREBP-1 (sterol regulatory element binding protein 1), and is encoded by a gene that maps to human chromosome 11p11.2.

**REFERENCES**


**APPLICATIONS**

17β-HSD12 (D-13) is recommended for detection of 17β-HSD12 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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); non cross-reactive with other 17β-HSD family members.

17β-HSD12 (D-13) is also recommended for detection of 17β-HSD12 in additional species, including canine, bovine and porcine.


Molecular Weight of 17β-HSD12: 33 kDa.

**RECOMMENDED SECONDARY REAGENTS**

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

**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.