

DESCRIPTION

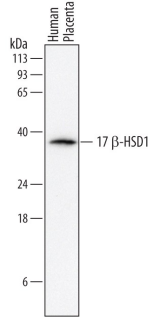
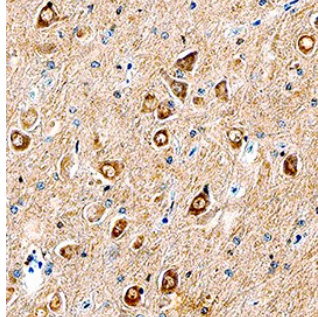
Species Reactivity	Human
Specificity	Detects human 17 β -HSD1/HSD17B1 in direct ELISAs and Western blots.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant human 17 β -HSD1/HSD17B1 Ala2-Gln328 Accession # P14061
Formulation	Lyophilized from a 0.2 μ m filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 μ m filtered solution in PBS.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.

	Recommended Concentration	Sample
Western Blot	0.2 μ g/mL	See Below
Immunohistochemistry	5-15 μ g/mL	See Below

DATA

<p>Western Blot</p>  <p>Detection of Human 17 β-HSD1/HSD17B1 by Western Blot. Western blot shows lysates of human placenta tissue. PVDF membrane was probed with 0.2 μg/mL of Sheep Anti-Human 17 β-HSD1/HSD17B1 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF7178) followed by HRP-conjugated Anti-Sheep IgG Secondary Antibody (Catalog # HAF016). A specific band was detected for 17 β-HSD1/HSD17B1 at approximately 35 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.</p>	<p>Immunohistochemistry</p>  <p>17 β-HSD1/HSD17B1 in Human Alzheimer's Brain. 17 β-HSD1/HSD17B1 was detected in immersion fixed paraffin-embedded sections of human Alzheimer's brain using Sheep Anti-Human 17 β-HSD1/HSD17B1 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF7178) at 10 μg/mL for 1 hour at room temperature followed by incubation with the Anti-Sheep IgG VisUCyte™ HRP Polymer Antibody (Catalog # VC006). Tissue was stained using DAB (brown) and counterstained with hematoxylin (blue). Specific staining was localized to cytoplasm in neurons. View our protocol for IHC Staining with VisUCyte HRP Polymer Detection Reagents.</p>
--	---

PREPARATION AND STORAGE

Reconstitution	Sterile PBS to a final concentration of 0.2 mg/mL.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> • 12 months from date of receipt, -20 to -70 °C as supplied. • 1 month, 2 to 8 °C under sterile conditions after reconstitution. • 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

HSD17B1 (Hydroxysteroid 17-beta dehydrogenase type 1; also 17 β -HSD1 and E2DH) is a 33-34 kDa member of the short chain dehydrogenase/reductase (SDR) superfamily of molecules. It is a cytoplasmic breast, placental and gonadal enzyme that both converts DHEA to estrogen A-diol, and inactivates DHT through oxidation and reduction. Human HSD17B1 is 328 amino acids (aa) in length. It contains an NADP binding site (aa 10-38) and a steroid catalytic site (aa 210-221). HSD17B1 functions as a 68 kDa noncovalently-linked homodimer. Over aa 2-328, human HSD17B1 shares 65% aa identity with mouse HSD17B1.