

## DESCRIPTION

<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects human 17 $\beta$ -HSD14/HSD17B14 in direct ELISAs.
<b>Source</b>	Monoclonal Mouse IgG <sub>2B</sub> Clone # 736043
<b>Purification</b>	Protein A or G purified from hybridoma culture supernatant
<b>Immunogen</b>	<i>E. coli</i> -derived recombinant human 17 $\beta$ -HSD14/HSD17B14 Ala2-Ser270 Accession # Q9BPX1
<b>Formulation</b>	Lyophilized from a 0.2 $\mu$ m filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 $\mu$ m filtered solution in PBS.

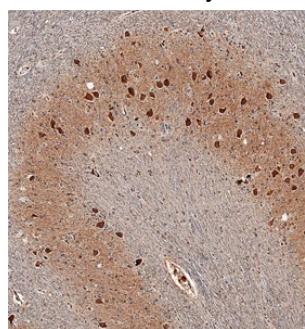
## APPLICATIONS

**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
<b>Immunohistochemistry</b>	8-25 $\mu$ g/mL	See Below

## DATA

### Immunohistochemistry



**17 $\beta$ -HSD14/HSD17B14 in Human Brain.** 17 $\beta$ -HSD14/HSD17B14 was detected in immersion fixed paraffin-embedded sections of human brain (medulla) using Mouse Anti-Human 17 $\beta$ -HSD14/HSD17B14 Monoclonal Antibody (Catalog # MAB7515) at 15  $\mu$ g/mL overnight at 4 °C. Before incubation with the primary antibody, tissue was subjected to heat-induced epitope retrieval using Antigen Retrieval Reagent-Basic (Catalog # CTS013). Tissue was stained using the Anti-Mouse HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # CTS002) and counterstained with hematoxylin (blue). Specific staining was localized to neuronal cytoplasm. View our protocol for [Chromogenic IHC Staining of Paraffin-embedded Tissue Sections](#).

## PREPARATION AND STORAGE

<b>Reconstitution</b>	Sterile PBS to a final concentration of 0.5 mg/mL.
<b>Shipping</b>	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
<b>Stability &amp; Storage</b>	<b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b> <ul style="list-style-type: none"> <li>● 12 months from date of receipt, -20 to -70 °C as supplied.</li> <li>● 1 month, 2 to 8 °C under sterile conditions after reconstitution.</li> <li>● 6 months, -20 to -70 °C under sterile conditions after reconstitution.</li> </ul>

## BACKGROUND

HSD-17b14 (hydroxysteroid (17-beta) dehydrogenase type14), also called 17bHSD14 or DHRS10, is a cytoplasmic 17beta-hydroxysteroid dehydrogenase that is a member of the SDR (short-chain dehydrogenase/reductase) family. It is a 270 amino acid, approximately 30 kDa protein with mRNA highly expressed in brain, placenta, liver and kidney. It converts estradiol to estrone, thus inactivating it, and is thought to regulate activity of estrogens and possibly dihydroepiandrosterone (DHEA) in the placenta and central nervous system. Human HSD-17b14 shares 80.5% amino acid sequence identity with mouse and rat HSD-17b14.