

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human GPER in direct ELISAs.
Source	Monoclonal Mouse IgG ₁ Clone # 730737
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant human GPER Met1-Ser62 Accession # Q99527
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 µm filtered solution in PBS.

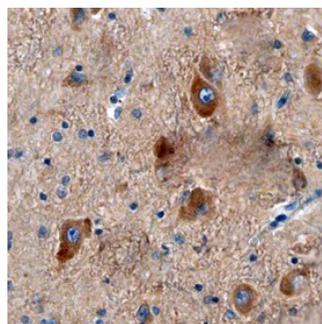
APPLICATIONS

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
Immunohistochemistry	8-25 µg/mL	See Below

DATA

Immunohistochemistry



GPER in Human Brain. GPER was detected in immersion fixed paraffin-embedded sections of human brain (hypothalamus) using Mouse Anti-Human GPER Monoclonal Antibody (Catalog # MAB5534) at 15 µg/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

Reconstitution	Sterile PBS to a final concentration of 0.5 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

GPER (G-Protein Coupled Estrogen Receptor 1; also GPR30, DRY12 and mER) is a 44 kDa, seven transmembrane (TM) member of the GPR-1 family of molecules. It is expressed on/in neurons, monocytes and endothelial cells. Its exact location is unclear; it has been described in both the cell membrane and ER. Human GPER is 375 amino acids (aa) in length. It contains an N-terminal extracellular region (aa 1-62), a series of seven TM domains (aa 63-327), and a C-terminal cytoplasmic tail (aa 328-375). The initial function attributed to GPER was that of a membrane receptor for estrogen. There are two potential splice variants for GPER. One shows a deletion of aa 32-49, while a second shows a 99 aa substitution for aa 308-375. Over aa 1-62, human GPER shares 57% aa identity with mouse GPER.