

DESCRIPTION

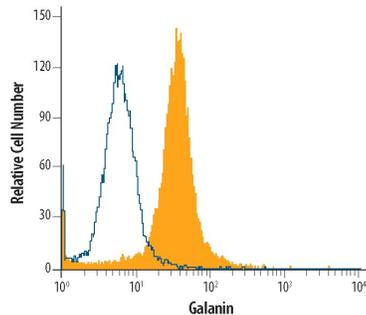
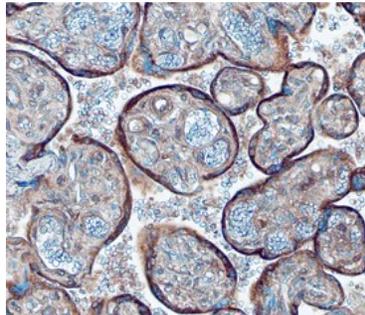
Species Reactivity	Human
Specificity	Detects human Galanin in direct ELISAs.
Source	Monoclonal Mouse IgG _{2B} Clone # 581403
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant human Galanin Ala20-Ser123 Accession # P22466
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or 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
Intracellular Staining by Flow Cytometry	2.5 µg/10 ⁶ cells	See Below
CyTOF-reported	This clone has been commercially reported for use in CyTOF®. Ready to be labeled using established conjugation methods. No BSA or other carrier proteins that could interfere with conjugation.	

DATA

<p>Intracellular Staining by Flow Cytometry</p>  <p>Detection of Galanin in U-87MG Human Cell Line by Flow Cytometry. U-87 MG human glioblastoma/astrocytoma cell line was stained with Human Galanin Monoclonal Antibody (Catalog # MAB5854, filled histogram) or isotype control antibody (Catalog # MAB0041, open histogram), followed by PerCP-conjugated Anti-Mouse IgG F(ab')₂ Secondary Antibody (Catalog # F0114). To facilitate intracellular staining, cells were fixed with paraformaldehyde and permeabilized with saponin.</p>	<p>Immunohistochemistry</p>  <p>Galanin in Human Placenta. Galanin was detected in immersion fixed paraffin-embedded sections of human placenta using Human Galanin Monoclonal Antibody (Catalog # MAB5854) at 25 µg/mL overnight at 4 °C. 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 syncytiotrophoblast cells. View our protocol for Chromogenic IHC Staining of Paraffin-embedded Tissue Sections.</p>
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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

Galanin (Glycine-Alanine, representing the N-and C-terminal amino acids in bovine Galanin; also GAL) is a 3 kDa (predicted), secreted member of the Galanin family of peptides. It is co-expressed with differing neuropeptides in a variety of neuron cell types. Galanin affects multiple metabolic processes by binding to one of three GPCRs. GalR1 blocks insulin secretion, GalR2 initiates neurogenesis and GalR3 influences addictive behavior. The human Galanin proform is 11-12 kDa in size (predicted) and 104 amino acids (aa) in length. Proteolytic processing generates a 30 aa mature Galanin peptide (aa 33-62), plus a phosphorylated (Ser117), C-terminal 59 aa GMAP fragment that is apparently involved in the processing of noxious stimuli. Once secreted, Galanin can undergo additional proteolytic degradation. Over aa 20-123, the human Galanin proform shares 72% aa identity with mouse Galanin proform.