

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human Galanin in direct ELISAs and Western blots.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
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 as a 0.2 µm filtered solution in PBS.

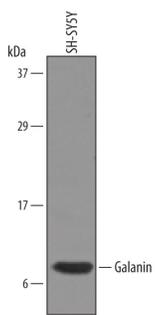
APPLICATIONS

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
Western Blot	1 µg/mL	See Below
Simple Western	10 µg/mL	See Below

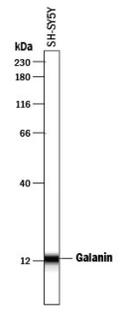
DATA

Western Blot



Detection of Human Galanin by Western Blot. Western blot shows lysates of SH-SY5Y human neuroblastoma cell line. PVDF membrane was probed with 1 µg/mL of Sheep Anti-Human Galanin Antigen Affinity-purified Polyclonal Antibody (Catalog # AF5854) followed by HRP-conjugated Anti-Sheep IgG Secondary Antibody (Catalog # HAF016). A specific band was detected for Galanin at approximately 10 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 8.

Simple Western



Detection of Human Galanin by Simple Western™. Simple Western lane view shows lysates of SH-SY5Y human neuroblastoma cell line, loaded at 0.2 mg/mL. A specific band was detected for Galanin at approximately 13 kDa (as indicated) using 10 µg/mL of Sheep Anti-Human Galanin Antigen Affinity-purified Polyclonal Antibody (Catalog # AF5854) followed by 1:50 dilution of HRP-conjugated Anti-Sheep IgG Secondary Antibody (Catalog # HAF016). This experiment was conducted under reducing conditions and using the 12-230 kDa separation system.



PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.2 mg/mL in sterile PBS.
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 10-12 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.