

DESCRIPTION

Species Reactivity	Mouse
Specificity	Detects mouse GDF-15 in direct ELISAs.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant mouse GDF-15 Ser189-Ala303 Accession # Q9Z0J7
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.

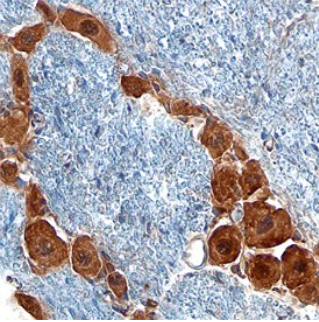
APPLICATIONS

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	5-15 µg/mL	See Below

DATA

Immunohistochemistry



GDF-15 in Mouse Brain. GDF-15 was detected in perfusion fixed frozen sections of mouse brain (trigeminal ganglion) using Sheep Anti-Mouse GDF-15 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF6385) at 15 µg/mL overnight at 4 °C. Tissue was stained using the Anti-Sheep HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # CTS019) and counterstained with hematoxylin (blue). Specific staining was localized to neuronal cytoplasm. View our protocol for [Chromogenic IHC Staining of Frozen Tissue Sections](#).

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

GDF-15 (Growth/differentiation factor 15; also PTGF, PDF, PL-74 and NAG-1) is a 25-30 kDa homodimeric member of the TGF-β superfamily of proteins. In rodent, GDF-15 is expressed in a diverse population of activated cell types, including hepatocytes, macrophages, Schwann cells, cardiomyocytes, osteoblasts, adipocytes, and epithelium of the small intestine and mammary gland. Functionally, GDF-15 has multiple effects, some tissue specific, including the induction of ACRP30 secretion from fat, an attenuation of the adverse effects of cardiac hypertrophy, and serving as a trophic factor for motor and sensory neurons. Mouse GDF-15 is synthesized as a 273 amino acid (aa) proprecursor that contains a cleavable 26 kDa, 158 aa glycosylated prodomain (aa 31-188) and a 12-14 kDa, 115 aa mature region (aa 189-303). In human, certain cells are noted to secrete an uncleaved 40 kDa proprecursor that, as a disulfide-linked homodimer, would run at about 80 kDa in nonreducing SDS-PAGE. Over aa 189-303, mouse GDF-15 shares 97% and 67% aa identity with rat and human GDF-15, respectively.