

DESCRIPTION

Species Reactivity	Mouse
Specificity	Detects mouse Gastrokine 1 in direct ELISAs and mouse and rat Gastrokine 1 in Western blots. In Western blots, approximately 10% cross-reactivity with recombinant human (rh) Gastrokine 1 and no cross-reactivity with rhBlottin is observed.
Source	Monoclonal Rat IgG _{2A} Clone # 759821
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant mouse Gastrokine 1 Tyr38-Tyr201 Accession # NP_079742
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.

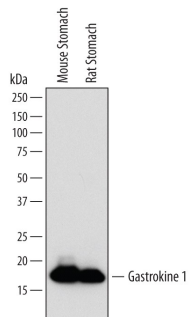
APPLICATIONS

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
Western Blot	1 µg/mL	See Below
Immunohistochemistry	8-25 µg/mL	See Below

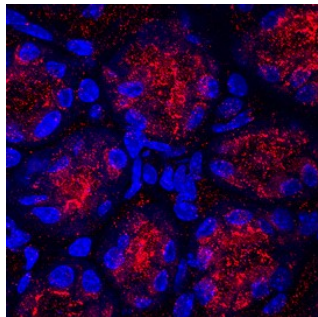
DATA

Western Blot



Detection of Mouse and Rat Gastrokine 1 by Western Blot. Western blot shows lysates of mouse stomach tissue and rat stomach tissue. PVDF membrane was probed with 1 µg/mL of Rat Anti-Mouse Gastrokine 1 Monoclonal Antibody (Catalog # MAB7287) followed by HRP-conjugated Anti-Rat IgG Secondary Antibody (Catalog # HAF005). A specific band was detected for Gastrokine 1 at approximately 17 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.

Immunohistochemistry



Gastrokine 1 in Mouse Intestine. Gastrokine 1 was detected in perfusion fixed frozen sections of mouse intestine using Rat Anti-Mouse Gastrokine 1 Monoclonal Antibody (Catalog # MAB7287) at 25 µg/mL overnight at 4 °C. Tissue was stained using the NorthernLights™ 557-conjugated Anti-Rat IgG Secondary Antibody (red; Catalog # NL013) and counterstained with DAPI (blue). Specific staining was localized to gastric glands. View our protocol for [Fluorescent IHC Staining of Frozen 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

Gastrokine 1 (GKN1; also CA11 and AMP-18) is a 17-20 kDa member of the Gastrokine protein family. It has limited expression, being restricted to mucous secreting pyloric antrum epithelial cells. Gastrokine 1 appears to promote epithelial cell proliferation and migration, and induce the formation of tight junctions between epithelial cells. By contrast, gastrokine 1 induces Fas expression in tumor cells, resulting in apoptosis. Mature mouse gastrokine 1 is 166 amino acids (aa) in length (aa 36-201 of SwissProt accession Q9CR36 or aa 19-184 of accession NP_079742). Based on the SwissProt sequence, it possesses one BRICHOS domain (aa 71-165) that contains a mitogenic sequence (aa 113-131). There is one potential alternative start site at Met18. Over aa 38-201 (accession Q9CR36), mouse gastrokine 1 shares 65% and 92% aa sequence identity with human and rat gastrokine 1, respectively.