

DESCRIPTION	
Species Reactivity	Human
Specificity	Detects human GIPR in direct ELISAs. Stains human GIPR transfected cells but not irrelevant transfectants.
Source	Monoclonal Mouse IgG ₁ Clone # 591853
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	NS0 mouse myeloma cell line transfected with human GIPR. Met1-Cys466 Accession # P48546
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
Flow Cytometry	0.25 µg/10 ⁶ cells	See Below
Immunohistochemistry	8-25 µg/mL	See Below
CyTOF-ready	Ready to be labeled using established conjugation methods. No BSA or other carrier proteins that could interfere with conjugation.	
Blockade of Receptor-ligand Interaction	At 2.5 µg/mL, this antibody will block >95% of the binding.	

DATA

Flow Cytometry

Detection of GIPR in HEK293 Human Cell Line Transfected with Human GIPR and eGFP by Flow Cytometry. HEK293 human embryonic kidney cell line transfected with either (A) human GIPR or (B) irrelevant transfectants and eGFP were stained with Mouse Anti-Human GIPR Monoclonal Antibody (Catalog # MAB8210) followed by Allophycocyanin-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # F0101B). Quadrant markers were set based on control antibody staining (Catalog # MAB002). View our protocol for [Staining Membrane-associated Proteins](#).

Immunohistochemistry

GIPR in Human Pancreas. GIPR was detected in immersion fixed paraffin-embedded sections of human pancreas using Mouse Anti-Human GIPR Monoclonal Antibody (Catalog # MAB8210) 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 islet cells. View our protocol for [Chromogenic IHC Staining of Paraffin-embedded Tissue Sections](#).

Blockade of Receptor-ligand Interaction

Human GIP binding to human GIPR-transfected HEK293 cells blocked by Human GIPR Antibody. In a functional flow cytometry test, biotinylated recombinant Human GIP (Catalog # 2257, 25 ng/mL) binds to Human GIPR-transfected HEK293 cells (black dotted line). Binding is completely blocked (orange histogram) by 2.5 µg/mL of Mouse Anti-Human GIPR Monoclonal Antibody (Catalog # MAB8210). Mouse IgG₁ Isotype Control (Catalog # MAB002) at 2.5 µg/mL was used as a control (blue line). Cells were stained with Streptavidin-APC (Catalog # F0050).

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.5 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

GIPR is a 7-transmembrane receptor for GIP (glucose-dependent insulintropic polypeptide or gastric inhibitory polypeptide). The 466 amino acid (aa) human GIPR contains 176 extracellular domain (ECD) aa that share 77% and 81% aa identity with mouse and rat GIPR ECD, respectively. A splice isoform of 430 aa has a deletion of aa 58-93 in the N-terminal ECD, while isoforms of 491 and 419 aa have alternate C-terminal cytoplasmic sequences. Engagement by GIP on pancreatic b-cells activates adenylate cyclase to regulate insulin compensation in the presence of high circulating glucose. GIPR is also expressed on adipocytes, osteoblasts and myelinating Schwann cell membranes.