

**DESCRIPTION**

<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects human GIPR in direct ELISAs. Stains human GIPR transfected cells but not irrelevant transfectants.
<b>Source</b>	Monoclonal Mouse IgG <sub>1</sub> Clone # 591853
<b>Purification</b>	Protein A or G purified from hybridoma culture supernatant
<b>Immunogen</b>	NS0 mouse myeloma cell line transfected with human GIPR. Met1-Cys466 Accession # P48546
<b>Formulation</b>	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.

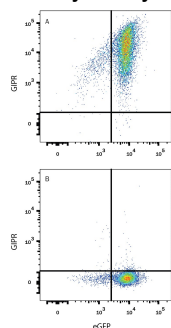
**APPLICATIONS**

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.

	<b>Recommended Concentration</b>	<b>Sample</b>
<b>Flow Cytometry</b>	0.25 µg/10 <sup>6</sup> cells	See Below
<b>Immunohistochemistry</b>	8-25 µg/mL	See Below
<b>CyTOF-ready</b>	Ready to be labeled using established conjugation methods. No BSA or other carrier proteins that could interfere with conjugation.	
<b>Blockade of Receptor-ligand Interaction</b>	At 2.5 µg/mL, this antibody will block >95% of the binding.	

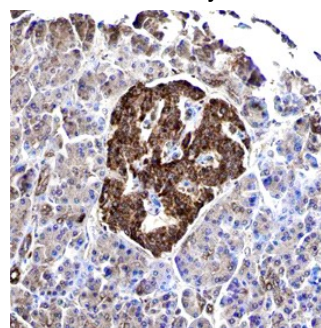
**DATA**

**Flow Cytometry**



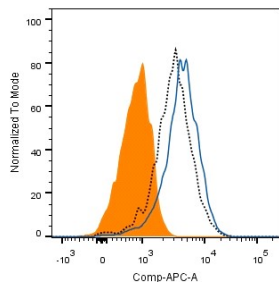
**Detection of GIPR in HEK293 Human Cell Line Transfected with Human GIPR and eGFP by Flow Cytometry.** HEK293 human embryonic kidney cell line transfected with either (A) human GIPR or (B) irrelevant transfectants and eGFP were stained with Mouse Anti-Human GIPR Monoclonal Antibody (Catalog # MAB8210) 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 IgG<sub>1</sub> 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**

<b>Reconstitution</b>	Reconstitute at 0.5 mg/mL in sterile PBS.
<b>Shipping</b>	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
<b>Stability &amp; Storage</b>	<b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b> <ul style="list-style-type: none"> <li>● 12 months from date of receipt, -20 to -70 °C as supplied.</li> <li>● 1 month, 2 to 8 °C under sterile conditions after reconstitution.</li> <li>● 6 months, -20 to -70 °C under sterile conditions after reconstitution.</li> </ul>

**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.