

#### DESCRIPTION

|                           |   |
|---------------------------|---|
| <b>Species Reactivity</b> | Human   |
| <b>Specificity</b>        | Detects human Lgr5/GPR-49 in direct ELISAs.   |
| <b>Source</b>             | Monoclonal Mouse IgG <sub>2B</sub> Clone # 750835   |
| <b>Purification</b>       | Protein A or G purified from hybridoma culture supernatant  |
| <b>Immunogen</b>          | Chinese hamster ovary cell line, CHO derived recombinant human Lgr5/GPR-49<br>Met1-Ile560<br>Accession # O75473   |
| <b>Conjugate</b>          | Alexa Fluor 647<br>Excitation Wavelength: 650 nm<br>Emission Wavelength: 668 nm   |
| <b>Formulation</b>        | Supplied 0.2 mg/mL in a saline solution containing BSA and Sodium Azide.<br><br>*Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions. |

#### 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> | 0.25-1 µg/10 <sup>6</sup> cells  | HEK293 Human Cell Line Transfected with Human Lgr5/GPR49 and eGFP |

#### PREPARATION AND STORAGE

|                                |  |
|--------------------------------|--|
| <b>Shipping</b>                | The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.                                  |
| <b>Stability &amp; Storage</b> | <b>Protect from light. Do not freeze.</b> <ul style="list-style-type: none"> <li>12 months from date of receipt, 2 to 8 °C as supplied.</li> </ul> |

#### BACKGROUND

GPR49 (G-protein-coupled receptor 49), also called LGR5 (leucine-rich repeat GPR 5) is a seven-transmembrane glycoprotein receptor that negatively regulates of Wnt signaling in the developing intestine. Expression of GPR49 is upregulated in intestinal stem cells and intestinal cancer stem cells and promotes carcinogenesis. GPR49 cDNA encodes 907 amino acids (aa), including a long N-terminal extracellular domain (aa 22-561) with 16 LRR domains. Human GPR49 shares 90% aa sequence identity with mouse and rat GPR45 within aa 22-561.

#### PRODUCT SPECIFIC NOTICES

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