

**DESCRIPTION**

<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects human FFAR3/GPR41 in direct ELISAs.
<b>Source</b>	Recombinant Monoclonal Rabbit IgG Clone # 2590G
<b>Purification</b>	Protein A or G purified from cell culture supernatant
<b>Immunogen</b>	Human FFAR3/GPR41 synthetic peptide
<b>Conjugate</b>	Alexa Fluor 750 Excitation Wavelength: 749 nm Emission Wavelength: 775 nm
<b>Formulation</b>	Supplied 0.2 mg/mL in a saline solution containing BSA and Sodium Azide.

\*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	U937 human histiocytic lymphoma cell line

**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**

GPR41 and GPR42 are two closely related genes that are part of a cluster of four adjacent G protein-coupled receptors(GPR40, 41, 42, and 43). There are only six nucleotide and amino acid differences between GPR41 and GPR42. GPR41 (also known as FFAR3) is a receptor for short chain fatty acids. The rank order of potency for agonists of this receptor isopropanoate = pentanoate= butyrate > acetate > formate. The activity of this receptor is coupled to the formation of inositol 1,4,5-trisphosphate, intracellular Ca<sup>2+</sup> mobilization, the activation of ERK 1/2 and inhibition of intracellular cAMP accumulation.

**PRODUCT SPECIFIC NOTICES**

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