

## DESCRIPTION

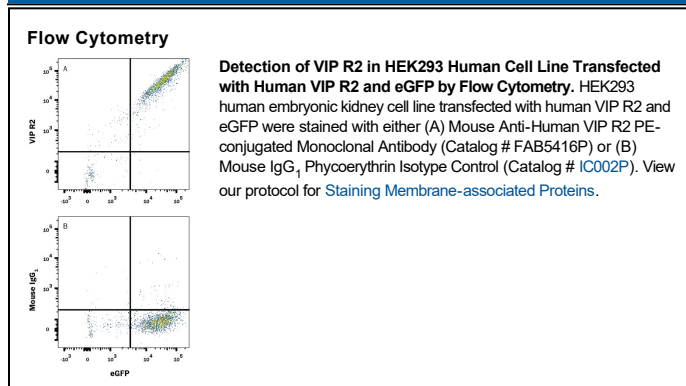
<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects human VIP R2 in direct ELISAs.
<b>Source</b>	Monoclonal Mouse IgG <sub>1</sub> Clone # 476031
<b>Purification</b>	Protein A or G purified from hybridoma culture supernatant
<b>Immunogen</b>	NS0 mouse myeloma cell line transfected with human VIP R2 Glu24-Ile438 Accession # P41587
<b>Conjugate</b>	Phycoerythrin Excitation Wavelength: 488 nm Emission Wavelength: 565-605 nm
<b>Formulation</b>	Supplied in a saline solution containing BSA and Sodium Azide. See Certificate of Analysis for details.  *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.

	Recommended Concentration	Sample
<b>Flow Cytometry</b>	10 $\mu$ L/10 <sup>6</sup> cells	See Below

## DATA



## 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

Human VIP R2 (Vasoactive Intestinal Polypeptide Receptor 2), also known as VPAC2 is a 60-70 kDa seven transmembrane glycoprotein receptor that belongs to the G protein coupled receptor 2 family of proteins. The mature chain contains in its first extracellular region a hormone receptor domain (aa 49-114) which includes three N-linked glycosylation sites and a "cilia targeting signal" comprised of and Arg-Asp-Tyr-Arg sequence. Human VIP R2 shares 85% aa sequence identity with mouse and rat VIP R2. In the extracellular domains, human VIP R2 shares 88% and 31% aa sequence identity with mouse VIP R2 and human VIP R1, respectively. VIP R2 is expressed predominantly in skeletal muscle, CD4<sup>+</sup> T cells, smooth muscle cells, plasmacytoid dendritic cells, hepatic progenitor cells, monocytes, synoviocytes and select neurons. VIP R1 and VIP R2 bind VIP with equal affinity, but the two receptors are not redundant. VIP R1 interacts with RAMPs; VIP R2 does not. In the dentate gyrus, VIP R1 drives stem cells into a granule cell phenotype while VIP R2 maintains a Nestin<sup>+</sup> phenotype.