

## DESCRIPTION

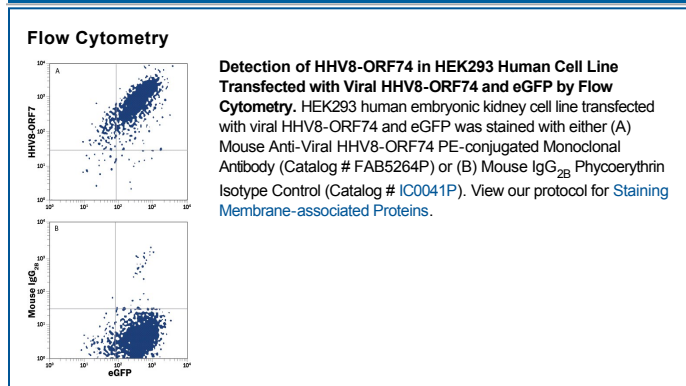
<b>Species Reactivity</b>	Viral
<b>Specificity</b>	Detects viral HHV8-ORF74 in flow cytometry.
<b>Source</b>	Monoclonal Mouse IgG <sub>2B</sub> Clone # 462510
<b>Purification</b>	Protein A or G purified from hybridoma culture supernatant
<b>Immunogen</b>	NS0 mouse myeloma cell line transfected with viral HHV8-ORF74 Met1-Thr342 Accession # AAB51506
<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

The herpes family represents about 130-140 double-stranded DNA viruses that infect almost all phyla in the animal kingdom. HHV8 (Human Herpes Virus-8) is one of eight herpes viruses known to infect humans. These eight viruses are categorized into three classes:  $\alpha$  (HHV1-3 that infect neurons),  $\beta$  (HHV5-7) and  $\gamma$  (HHV4 and 8 that lie latent in B cells). HHV8 contains about 100 genes/ORFs, including viral homologues for MIP (vMIP), Bcl-2, IL-6, NCAM and IL-8 R2. HHV8-ORF74 is a homologue of IL-8 R2, and when expressed shows a 44-46 kDa G-protein coupled receptor that belongs to the rhodopsin/ $\beta$ -adrenergic family of GPCRs. Unlike IL-8 R2, HHV8-ORF74 is constitutively active. Its activity is regulated by multiple chemokines that can either upregulate basal activity (IL-8; GRO- $\alpha$ ), downregulate basal activity (IP-10; vMIP-II; SFD-1) or leave activity untouched (NAP-2; ENA-78), acting instead as a blocking factor. HHV8-ORF74 activation on infected endothelial cells appears to drive them into a spindle-shape, characteristic of that seen in Kaposi's sarcoma, and induces the expression of multiple proangiogenic molecules such as IL-6, IL-8, ICAM-1, VCAM-1 and VEGF plus VEGF R2. These effects appear to be necessary, but not necessarily sufficient, for Kaposi's sarcoma development. The ORF74 GPCR shares 29% and 27% amino acid sequence identity with human CXCR2 and CXCR1, respectively.