TECHNICAL DATA SHEET

Purified Rabbit Anti-KSHV GPCR

Catalog Number: TP-505

Lot Number:

Content: Purified rabbit immunoglobulins,

200 µg, lyophilized

(Reconstitute to 1 mg/ml by adding 200 µl PBS)

Product Description and Usage: For research use only. This polyclonal antibody, which reacts with the KSHV GPCR, was generated using an *E. coliexpressed* KSHV GPCR N-terminal fragment (amino acids 1-41) as immunogen. The antibody recognizes the KSHV GPCR expressed in transfected cells using flow cytometry.

Storage Condition: 4°C for short term storage or -20°C in small aliquots for long term storage. Avoid repeated freeze and thaw.

Background: Kaposi's carcomaassociated herpesvirus (KSHV, or human herpesvirus 8, HHV8), is a gamma herpesvirus that contain an open reading frame encoding a G proteincoupled receptor (GPCR) with putative 7 transmembrane domains. This GPCR has been shown to bind a number of chemokines including IL-8, NAP-2, PF-4, MGSA/Groα, I-309, RANTES, MCP- 1, and MIP- $1\beta^1$. The receptor is constitutively activated without chemokine binding, and it stimulates cell proliferation¹. KSHV GPCR is also a viral oncogene that stimulates angiogenesis through induction of VEGF expression². IP-10, a chemokine, can inhibit constitutively activated KSHV GPCR³.

References:

- Arvanitakis L., et al. (1997) Human herpesvirus KSHV encodes a constitutively activated G-protein-coupled receptor linked to cell proliferation. Nature 385:347-350.
- 2. Bais, C., et al. (1998) C-protein-coupled receptor for Kaposi's carcoma-associated herpesvirus is a viral oncogene and angiogenesis activator. Nature 391:86-89.
- 3. Geras-Raaka, E., et al. (1998) Human interferon-gamma-inducible protein (IP-10) inhibits constitutive signaling of Kaposi's carcoma-associated herpesvirus G protein-coupled receptor. J. Exp. Med. 188:405-408.