

**Rat Anti-HHV8 [LN53]: RT0001, RT0001RTU7**

**Intended Use:** For Research Use Only

**Description:** Human herpesvirus-8/Kaposi's sarcoma-associated herpesvirus (HHV-8/KSHV) and macaque retroperitoneal fibromatosis herpesvirus (RFHV) were originally identified in AIDS patients in association with Kaposi's sarcoma (KS) and in retroperitoneal fibromatosis (RF) tumor lesions of macaques with simian AIDS, respectively. The most prominent protein expressed in cells latently infected with KSHV and RFHV is the orf73 gene product known as the latency-associated nuclear antigen (LANA or LNA). LANA is a nuclear protein that functions to ensure the maintenance of the viral genome by tethering the viral episomal DNA to host cell chromosomes. LANA also regulates the cellular transcription program in host cells through interaction with a number of cellular proteins, including transcriptional regulators and known tumor suppressors, p53 and pRB. In addition, LANA directly influences the viral transcription program and helps maintain the latent state of the virus by inhibiting viral replication. KSHV LANA consists of a serine- and proline-rich N-terminal domain with a nuclear localization signal (NLS), a chromatin-binding motif (CBM), and domains responsible for interaction with the transcription regulators, mSin3 complex and Sp1. The central domain contains several highly repetitive acidic regions that vary in length and are responsible for the size variation of LANA proteins from different KSHV isolates that can range from 1003 to 1162 amino acids. The proline-rich C-terminal third domain contains another NLS and is responsible for LANA dimerization and binding to the terminal repeats (TR) of the viral genomic DNA. The C-terminal domain is responsible for interaction with tumor suppressors pRB and p53.

**Specifications**

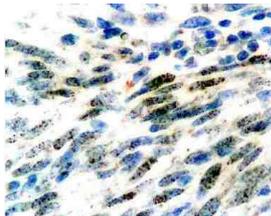
Clone: LN53  
 Source: Rat  
 Isotype: IgG2c/k  
 Reactivity: Human, Rhesus Macaque  
 Localization: Nucleus  
 Formulation: Purified antibody in buffer containing 0.1 M Tris-Glycine (pH 7.4), 150 mM NaCl and <0.05% sodium azide (NaN3)  
 Storage: Store at 2°- 8°C  
 Applications: IHC, ELISA, Flow Cyt., ICC/IF, IP  
 Package:

Description	Catalog No.	Size
HHV8 Concentrated	RT0001	1 ml
HHV8 Prediluted	RT0001RTU7	7 ml

**IHC Procedure\***

Positive Control Tissue: Kaposi's sarcoma  
 Concentrated Dilution: 25-100  
 Pretreatment: Citrate pH6.0 or EDTA pH8.0, 15 minutes using Pressure Cooker, or 30-60 minutes using water bath at 95°-99°C  
 Incubation Time and Temp: 30-60 minutes @ RT  
 Detection: Refer to the detection system manual

\* Result should be confirmed by an established diagnostic procedure.



Infected cultured cells stained with anti-HHV-8 using DAB

**References:**

1. Combination of arsenic and interferon- $\alpha$  inhibits expression of KSHV latent transcripts and synergistically improves survival of mice with primary effusion lymphomas. El Hajj H, et al. PLoS One 8:e79474, 2013.
2. The morphologic variants of KSHV/HHV 8-associated lymphoproliferations. Loddenkemper C, et al. Pathologe: 2006.

Doc. 100-RT0001  
Rev. A