



Native EBV LMP2 Tetramer (DAG3111)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Product Overview	EBV LMP2 Tetramer
Species	EBV
Conjugate	Unconjugated
Applications	immunogen
Concentration	50ug per 100ul
Preservative	None
Storage	2-8°C short term, -20°C long term

BACKGROUND

Introduction

Epstein–Barr virus (EBV) is a member of the herpesvirus family and one of the most common human viruses. Most people become infected with EBV during their lives. Primary infections usually results in infectious mononucleosis (glandular fever) but the virus can also lay dormant in B lymphocytes and when reactivated become associated with more serious disease such as Burkitt's lymphoma, nasopharyngeal carcinoma and Hodgkin's disease. EBV latently infects B lymphocytes. Infected B cells express EBV nuclear antigens and latent proteins LMP1, LMP2A and LMP2B. LMP2A forms aggregates in the plasma membranes of B lymphocytes, where it functions as a negative regulator of the Src and Syk protein tyrosine kinases. Studies show that LMP2A blocks B-cell receptor (BCR) signal transduction in EBV immortalized B cells in vitro and may play an important role in maintaining a latent EBV infection within the peripheral blood B cells of infected individuals. Varicella-zoster virus (VZV or HHV3) is a member of the genus Varicellovirus in the Alphaherpesvirinae subfamily of the Herpesviridae. It is the causative agent of chicken pox (varicella) in children, after which it establishes latency in the sensory ganglia with the potential to reactivate at a later time to cause shingles (zoster). This is an extremely stable virus. The genome is comprised of ~125 kb of linear double-stranded DNA containing

approximately 71 open reading frames (ORFs). The viral structure is similar to that of other alphaherpesviruses, consisting of two unique regions, unique long and unique short, each flanked by inverted repeats; short repeats termed terminal repeat long and internal repeat long border the unique long region, while larger repeats termed terminal repeat short (TRS) and internal repeat short (IRS) border the unique short region. Varicella-zoster virus (VZV) interacts with cell surface heparan sulfate proteoglycans during virus attachment.

Keywords

EBV; Epstein-Barr virus
