Herpesvirus 6 (HHV-6) ELISpot Human IFN-y Kit

Product Details

Application

The HHV-6 Human IFN-γ Enzyme-Linked ImmunoSpot (ELISpot) kit is a highly sensitive method used to detect and quantify individual cells that secrete IFN-γ after stimulation with the ImmuneSelect HHV-6 Peptide Pool. This assay is utilized in immunology to monitor cellular immune responses at the single-cell level and reliably detects and measures human IFN-γ secretion by HHV-6 stimulated effector cells.

Description

Human Herpesvirus 6 (HHV-6) is a common herpesvirus that infects nearly all humans by the age of three. It is the causative agent of roseola infantum (exanthem subitum) and has been associated with various clinical conditions, including febrile seizures, encephalitis, and bone marrow suppression in immunocompromised individuals. There is also evidence to suggest that the virus may be linked to reproductive disorders such as infertility. HHV-6 exists in two variants, HHV-6A and HHV-6B, with HHV-6B being more commonly linked to clinical disease. Accurate diagnosis of HHV-6 is crucial for initiating timely antiviral therapy, particularly in severe cases and in immunocompromised patients. Early detection and intervention is critical to reduce morbidity and mortality associated with HHV-6 reactivation and disease.

The immune response to HHV-6, particularly T cell mediated immunity, is crucial for controlling the infection and preventing disease reactivation. ELISpot assays can be used to measure HHV-6-specific T cell response by detecting the cytokine production in response to peptide derived from HHV-6 antigens. Research has shown that robust HHV-6-specific T cell responses are associated with better clinical outcomes for transplant recipients, underscoring the importance of immune monitoring in HHV-6 infection management.

Product Specifications

Product ViraxImmune HHV-6 ELISpot Human IFN-γ kit

Application ELISpot

Analyte IFN-γ

Reactivity Human

Specificity Human IFN-γ.

Storage Store plates and reagents between 2 and 8°C. Peptide pool vial must be stored at -20

°C or below.

Shelf life 18 months from date of receipt.

Kit content

Peptide pools ImmuneSelect HHV-6 (42 peptides covering immunodominant MHC-I and

MHC-II epitopes)

Plate ELISpot plate precoated with IFN-γ capture antibody

Detection mAb Biotinylated recombinant IFN-γ antibody

Enzyme conjugate Streptavidin-ALP (Alkaline Phosphatase)

Substrate BCIP/NBT Ready-to-use solution

Blocking agent Bovine Serum Albumin (BSA)