Cytomegalovirus (CMV) ELISpot Human IFN-y Kit

Product Details

Human Cytomegalovirus (CMV) is a prevalent herpesvirus that infects most people worldwide. While CMV infection is often asymptomatic in healthy individuals, it poses significant health risks to immunocompromised patients, such as those undergoing organ transplantation, and to infants born to infected mothers. CMV infection is a significant cause of morbidity and mortality in these populations, leading to complications like pneumonia, retinitis, gastrointestinal disease, and encephalitis.

Assessment of CMV-specific cellular immunity is vital for controlling viral replication and preventing disease, particularly for recipients of donor transplants. ELISpot assays can be utilized to measure CMV-specific T cell responses by detecting cytokine production in response to viral peptides derived from CMV antigen. These assays can help identify individuals at higher risk of CMV disease by assessing their cellular immune response, thereby guiding antiviral prophylaxis and treatment strategies. Research has demonstrated that robust CMV-specific T cell responses correlate with lower rates of CMV disease post-transplantation, underscoring the importance of immune monitoring in managing CMV infections.

Product Specifications

Product ViraxImmune CMV 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 Human CMV (37 peptides from pp65, IE1 and UL123 proteins)

Plate ELISpot plate precoated with IFN-y 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)