Respiratory Syncytial Virus (RSV) ELISpot Human IFN-γ Kit

Product Details

Application

The Respiratory syncytial virus (RSV) 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 RSV 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 RSV stimulated effector cells.

Description

RSV is a leading cause of acute lower respiratory tract infections, particularly in infants, young children, the elderly, and immunocompromised individuals. RSV is associated with high rates of hospitalization and significant morbidity and mortality in these vulnerable populations. Early and accurate diagnosis of RSV is essential for initiating appropriate antiviral and supportive therapies, which can mitigate the severity of the disease and reduce the risk of complications. Timely diagnosis also helps in the implementation of infection control measures to prevent the spread of RSV in healthcare settings and among high-risk groups.

T cell responses are essential for the clearance of RSV and for protection against reinfection. ELISpot assays can measure RSV-specific T cell responses by detecting cytokine production in response to peptides covering the main epitopes derived from RSV antigens. Research has shown that strong RSV-specific T cell responses are associated with better clinical outcomes and lower risk of severe disease, highlighting the importance of monitoring cellular immunity in managing RSV infections.

Product Specifications

Product	ViraxImmune RSV 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 RSV (42 peptides from Human respiratory syncytial virus A2 and Human orthopneumovirus)

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)