

SIV Envelop Protein gp120 (Isolate SIVmac251v31523ru28)

CATALOG NUMBER: SIV-012-005P, 50 µg

Introduction	Envelope glycoprotein GP120 (or gp120) is a glycoprotein exposed on the surface of the HIV envelope. The 120 in its name comes from its molecular weight of 120. Gp120 is essential for virus entry into cells as it plays a vital role in attachment to specific cell surface receptors. These receptors are DC-SIGN, Heparan Sulfate Proteoglycan and a specific interaction with the CD4 receptor, particularly on helper T-cells. Binding to CD4 induces the start of a cascade of conformational changes in gp120 and gp41 that lead to the fusion of the viral with the host cell membrane. Binding to CD4 is mainly electrostatic although there are van der Waals interactions and hydrogen bonds.
Applications	Western blot standard, antibody ELISA, HIV-1 entry inhibition, etc.
Description	Envelop protein gp120 expressed and purified from 293 cell culture
Viral Protein	6xHis tagged gp120 (SIV/mac251)(isolate SIVmac251v31523ru28) protein (amino acid 31-528) (Genebank accession#: GU952740)
Storage	Store at -20 °C; Stable for 3-months from the date of shipment when kept at 4 °C. Non-hazardous. No MSDS required.
Concentration	1 mg/ml in PBS
Specificity	≥ 95% purity (SDS PAGE)

150 kD
100 kD
75 kD
50 kD
37 kD
25 kD
20 kD



SDS-PAGE: purified SIV gp120 protein (isolate SIVmac251v31523ru28)

Reference

1. Stone, M., etc. A limited number of simian immunodeficiency virus (SIV) env variants are transmitted to rhesus macaques vaginally inoculated with SIVmac251. J. Virol. 84 (14), 7083-7095 (2010).
2. Manrique, M., etc. Resistance to infection, early and persistent suppression of SIVmac251 viremia and significant reduction of tissue viral burden after mucosal vaccination in females Rhesus macaques. J Virol. 2013 Oct 23

