



Recombinant SIV (mac251) Glycoprotein 120 (a.a. 21-523) [His] (DAG2062)

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

PRODUCT INFORMATION

Product Overview	6xHis tagged gp120(mac251)(SIV)protein (a.a.21-523)
Antigen Description	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 kilodaltons. gp120 is essential for virus entry into cells as it plays a vital role in seeking out specific cell surface receptors for entry. The crystal structure of gp120 complexed to D1D2 CD4 and a neutralizing antibody Fab was solved by Peter Kwong in 1998. It is organized with an outer domain, an inner domain with respect to its termini and a bridging sheet. The gp120 gene, env, is around 1.5 kb long and codes for around 500 amino acids. Three gp120s, bound as heterodimers to a transmembrane glycoprotein, gp41, are thought to combine in a trimer to form the envelope spike, which is involved in virus-cell attachment.
Species	SIV
Purity	≥ 95%
Conjugate	His
Applications	WB standard, antibody ELISA, etc
Format	Each vial contains 100 µg purified protein in PBS.
Concentration	1 mg/ml
Size	100 µg, 1 mg
Preservative	None
Storage	2-8°C short term, -20°C long term

BACKGROUND

Introduction Simian immunodeficiency virus (SIV), also known as African Green Monkey virus, is a retrovirus able to infect at least 33 species of African primates. Based on analysis of strains found in four species of monkeys from Bioko Island, which was isolated from the mainland by rising sea levels about 11, 000 years ago, it has been concluded that SIV has been present in monkeys and apes for at least 32, 000 years, and probably much longer. Virus strains from two of these primate species, SIVsmm in sooty mangabeys and SIVcpz in chimpanzees, are believed to have crossed the species barrier into humans, resulting in HIV-2 and HIV-1, respectively. The most likely route of transmission of HIV-1 to humans involves contact with the blood of chimps that are often hunted for bushmeat in Africa.

Keywords SIV gp120; Envelope surface glycoprotein gp120; Glycoprotein 120; gp120; gp120 glycoprotein; Simian immunodeficiency virus; SU; Surface protein; Retroviridae; Lentivirus