CD Creative Diagnostics®

Recombinant HIV type 2 gp36 (DAG4631)

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

PRODUCT INFORMATION

Product Overview	Recombinant GP36 HIV-II antigen
Specificity	strong HIV-II immunocompetence
Species	HIV
Purity	> 95% (SDS-PAGE),
Conjugate	Unconjugated
Applications	For ELISA or rapid test, used in double antigen sandwich method. Serum, For label
Preservative	None
Storage	2-8°C short term, -20°C long term

BACKGROUND

Introduction
HIV-1 and HIV-2 appear to package their RNA differently. HIV-1 binds to any appropriate RNA whereas HIV-2 preferentially binds to mRNA which creates the Gag protein itself. This means that HIV-1 is better able to mutate. HIV-2 is transmitted in the same ways as HIV-1: Through exposure to bodily fluids such as blood, semen, tears and vaginal fluids. Immunodeficiency develops more slowly with HIV-2.HIV-2 is less infectious in the early stages of the virus than with HIV-1.The infectiousness of HIV-2 increases as the virus progresses.Major differences include reduced pathogenicity of HIV-2 relative to HIV-1, enhanced immune control of HIV-2 infection and often some degree of CD4-independence. Despite considerable sequence and phenotypic differences between HIV-1 and 2 envelopes, structurally they are quite similar. Both membrane-anchored proteins eventually form the 6-helix bundles from the N-terminal and C-terminal regions of the ectodomain, which is common to many viral and cellular fusion proteins and which seems to drive fusion. HIV-1 gp41 helical regions can form more stable 6-helix bundles than HIV-2 gp41 helical regions however HIV-2 fusion occurs at a lower threshold

temperature (25°C), does not require Ca2+ in the medium, is insensitive to treatment of target cells with cytochalasin B, and is not affected by target membrane glycosphingolipid composition.

Keywords	Gp36; HIV 2; Human immunodeficiency virus 2; Human Immunodeficiency Virus Type 2; HIV-2 Gp36; Human Immunodeficiency Virus Type 2 Gp36; Retroviridae; Lentivirus