



Recombinant HIV type 2 gp36 [MBP] (DAG1560)

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

PRODUCT INFORMATION

Product Overview	HIV-2 gp36 MBP Tag recombinant- is a 61 kDa protein and contains the sequence of HIV-2 envelope immunodominant regions gp36.
Species	HIV
Purity	Greater than 95.0% as determined by HPLC analysis and SDS-PAGE.
Conjugate	MBP
Applications	HIV-2 gp36 antigen is suitable for ELISA and Western blots, excellent antigen for early detection of HIV seroconvertors with minimal specificity problems.
Format	Sterile filtered colorless clear solution.
Size	100 µg, 500 µg, 1 mg
Buffer	20mM sodium carbonate pH-9.6 and 0.02 % sodium azide.
Preservative	0.02% Sodium Azide
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

Human Immunodeficiency Virus; HIV gp36; HIV; HIV-2 gp36; HIV-2; HIV type 2 gp36
