



Recombinant HIV type 2 gp36 (DAG523)

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

PRODUCT INFORMATION

Product Overview	Recombinant Human Immunodeficiency Virus Type 2 Envelope, Gp36, contains the HIV-2 immunodominant region of envelope gp36 (Not full-length gp36), but does not contain a fusion partner. Immunoreactive with HIV-2 positive sera. It was expressed in E. coli,
Species	HIV
Purity	> 95% pure (10% PAGE coomassie staining). DEAE Sepharose chromatography
Conjugate	Unconjugated
Applications	Suitable for use in ELISA and Western blot. Each laboratory should determine an optimum working titer for use in its particular application. Other applications have not been tested but use in such assays should not necessarily be excluded.
Molecular Weight	16 kDa
Format	Liquid
Concentration	1 mg/ml
Size	1 mg
Buffer	50mM Tris HCl, 8M Urea, pH 8.4
Preservative	None
Storage	Upon receipt, store at -2 - 8°C. Avoid multiple freeze/thaw cycles.

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
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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
