



Product Data Sheet

□ Cat # RP-571

Recombinant HIV-2 gp36

Size: □ 100 ug □ 500 ug

**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  $Ca^{2+}$  in the medium, is insensitive to treatment of target cells with cytochalasin B, and is not affected by target membrane glycosphingolipid composition.

**Description:**

HIV-2 gp36 recombinant- contains the full-length sequence of HIV-2 envelope immunodominant regions gp36.

**Source:**

Escherichia Coli.

**Physical Appearance:**

Sterile filtered colorless clear solution.

**Formulation:**

50mM TRIS HCL & 8M urea, pH 9.0

**Purity:**

Greater than 95.0% as determined by HPLC analysis and SDS-PAGE.

**Stability:**

Protein is shipped at ambient temperature. Upon arrival, Store at -20°C.

Stable for Five years frozen. One month in solution at room temperature

**Specificity:**

Immunoreactive with all sera of HIV-2 infected individuals

**Applications:**

Antigen in ELISA and Western blots, excellent antigen for early detection of HIV seroconvertors with minimal specificity problems.

**Usage:**

This item is for LABORATORY RESEARCH USE ONLY. The product may not be used as drugs, agricultural or pesticidal products, food additives or household chemicals. If supplied in powder then reconstitute it in 100 ul water for 1 mg/ml stock and store in liquid at 4°C for ~1 week or aliquots in suitable size and store at -20°C for long term storage.

Rev. 80311F