

HIV-2 gp36 env (His-tagged) - Purified

Catalog No.: AR10627PU-S

Quantity: 0.1 mg

Background: 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 (Chinese Hamster Ovary)red 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-1gp41 helical regions can form more stable 6-helix bundles than HIV-2gp41 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.

Source: E. coli

Format: **State:** Liquid sterile filtered colorless clear solution
Purity: > 95.0% as determined by HPLC analysis and SDS-PAGE
Buffer System: 20mM Sodium Carbonate pH 9.6
Preservatives: 0.02% Sodium Azide

Applications: HIV-2 gp36 antigen is suitable for ELISA and Western blots, excellent antigen for early detection of HIV seroconvertors with minimal specificity problems. Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.

Description: HIV-2 gp36 *His tag* recombinant- is a 64 kDa protein and contains the sequence of HIV-2 envelope immunodominant regions gp36 having a 6X His tag / chaperone protein on the N-terminus.

Specificity: Immunoreactive with all sera of HIV-2 infected individuals.

Storage: Store undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing. Shelf life: one year from despatch.