

HIV-2 gp32 env - Biotin

Catalog No.: AR10619BT-L

Quantity: 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) 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.

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 PBS pH 7.8, NaCl 0.5M, DTT 1mM, 8M urea and 0.4M Imidazole

Applications: HIV-2 gp32 Biotin Labeled 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 gp32 Biotin Labeled recombinant- contains the full-length sequence of HIV-2 envelope immunodominant regions gp32.
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.