

32-5596: Recombinant HIV-2 gp32, Biotin Labeled

Description

Source : Escherichia Coli. HIV-2 gp32 Biotin Labeled recombinant- contains the full-length sequence of HIV-2 envelope immunodominant regions gp32 having a Mw of 32kDa and fused to a beta-galactosidase at N-terminus. 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.

Product Info

Amount :	0.5 mg
Purification :	Greater than 95.0% as determined by SDS-PAGE.
Content :	0.01M Na ₂ CO ₃ , 10mM EDTA, 14mM beta-ME and 0.02% Sarcosyl.
Storage condition :	HIV-2 gp-32 although stable at room temperature for 3 weeks, should be stored at 4°C.