

Recombinant HIV HIV2gp36 protein, β-gal-tagged

Cat. No. HIV2gp36-201H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	HIV-2 gp36 34kDa recombinant has 397 amino acids and contains the sequence of HIV-2 envelope immunodominant regions gp36. The protein is fused to beta-galactosidase (114kDa) at N-terminus.
Species	HIV
Source	E.coli
ProteinLength	397 amino acids
Description	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

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	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.
Form	Sterile filtered colorless clear solution. 0.01M Na ₂ CO ₃ , 0.01M Na ₃ EDTA, 0.014 Mβ-mercaptoethanol, 0.05% Tween-20.
Molecular Mass	34kDa
AA sequence	EQTMVQDDPSTCRGEFLYCNMTWFLNWLENKTHRNYAPCHIKQIINTWHKVGRNVY LPPREGELSCNSTVTSIIANIDWQNNNQTNITFSAEVAELRLELGDYKLVEITPIGFA PTKEKRYSSAHGRHTRGVFLGLGFLATAGSAMGAASLTVSAQSRTLLAGIVQQQ QQLLDVVKRQQELLRLTVWGTKNLQARVTAIEKYLQDQARLNSWGCAFRQVCHTT VPWVNDLAPDWDNMTWQEWKQVRYLEANISKSLEQAQIQQEKNMYELQKLNS WDIFGNWFDLTSWVKYIQYGVLIIVAVIALRIVYVQMLSRLRKGYRPVFSSPPGYIQ QIHIIHKDRGQPANEETEEDGGSNGGDRYWPWPIAYIHFLIRQLIRLLTRLYSICSQAC.
Purity	Greater than 95.0% as determined by HPLC analysis and SDS-PAGE.
Usage	The products are furnished for LABORATORY RESEARCH USE ONLY. The product may not be used as drugs, agricultural or pesticidal products, food additives or household chemicals.
Stability	HIV-2 gp-36 although stable at 4°C for 1 week, should be stored below -18°C. Please prevent freeze thaw cycles.
Specificity	Reactive with human HIV positive serum.
Shipping	Ice Packs