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 Ca2+ 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 Na2CO3, 0.01M Na3EDTA, 0.014 Mb-mercaptoethanol, 0.05% Tween-20.
Molecular Mass	34kDa
AA sequence	EQTMVQDDPSTCRGEFLYCNMTWFLNWIENKTHRNYAPCHIKQIINTWHKVGRNVY LPPREGELSCNSTVTSIIANIDWQNNNQTNITFSAEVAELYRLELGDYKLVEITPIGFA PTKEKRYSSAHGRHTRGVFVLGFLGFLATAGSAMGAASLTVSAQSRTLLAGIVQQQ QQLLDVVKRQQELLRLTVWGTKNLQARVTAIEKYLQDQARLNSWGCAFRQVCHTT VPWVNDSLAPDWDNMTWQEWEKQVRYLEANISKSLEQAQIQQEKNMYELQKLNS WDIFGNWFDLTSWVKYIQYGVLIIVAVIALRIVIYVVQMLSRLRKGYRPVFSSPPGYIQ QIHIHKDRGQPANEETEEDGGSNGGDRYWPWPIAYIHFLIRQLIRLLTRLYSICSQAC.
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

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