Recombinant HIV-I Envelope conjugated to HIV-2 gp39

Catalog No.	CSI15821A	Quantity:	100 µg
	CSI15821B		0.5 mg
	CSI15821C		1.0 mg

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 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.
HIV-1,2 recombinant- *E. coli* derived recombinant 27 kDa protein contains the C-terminus of gp120 and most of gp41. The protein is conjugated to a 23 amino acids synthetic peptide derived from gp39 of HIV-2.

Source: *E. coli*

Formulation: 100 mM Na-PO4, pH 6 and 0.05% SDS.

Purity: Greater than 95.0% as determined by HPLC analysis and SDS-PAGE.

Physical Appearance: Sterile filtered colorless clear solution.

Specific Activity: Immunoreactive with all sera of HIV-1, HIV type O & HIV-2 infected individuals

Applications: HIV-1,2 antigen is suitable for ELISA and Western blots, excellent antigen for early detection of HIV seroconvertors with minimal specificity problems.

Storage & Stability: HIV-1,2 although stable at 4°C for 1 week, should be stored below -18°C.
Please prevent freeze thaw cycles.

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