

Antigen Datasheet

OVERVIEW AND PROPERTIES

Product Name	PtX™ Human Immunodeficiency Virus HIV-2 gp36 protein
Synonyms	Envelope gp36
Catalogue Number	CBT_P0006
Expression Host	<i>Nicotiana benthamiana</i> plants
Animal Free	Yes
Class	Recombinant
Type	Protein
Original Gene species	HIV-2
Molecular Weight (kDa)	Different glycoforms at ~31 - ~35 kDa on SDS-PAGE under reducing conditions. Dimer commonly formed at ~65 kDa.
Sequence	AIEKYLQDQARLNSWGC AFRQVCHTTVPWVN
Tag	Mouse Fc IgG2a with hinge region
Reporter Protein	None
Description	This product is a recombinant HIV-2 gp36 protein fused at the genetic level to Mouse Fc Tag. It was produced in <i>Nicotiana benthamiana</i> plants via <i>Agrobacterium tumefaciens</i> -mediated infiltration.
Protein Name	Gp36
Accession Number	UniProtKB: P04577 (amino acids 581-611)
Verified Applications	Western blot, ELISA
Concentration	0.25-0.5 mg/ml
Form	Liquid
Colour	Clear
Preparation	Ready to use
Storage	Short term (up to one week): 2 – 8 °C Long term: Aliquot and store at – 20 °C Store immediately. Aliquot and avoid multiple freeze thaw cycles.
Storage Buffer	0.1 M Phosphate Buffered Saline, pH 7.4
Purification Notes	This product was purified using protein A- affinity chromatography.
Purity	95 % as determined by SDS-PAGE
General Notes	If for any reason the product does not perform as specified, please contact our scientific support team for assistance by emailing techsupport@capebiologix.com . For Research Use only, unless otherwise indicated.

IMAGES

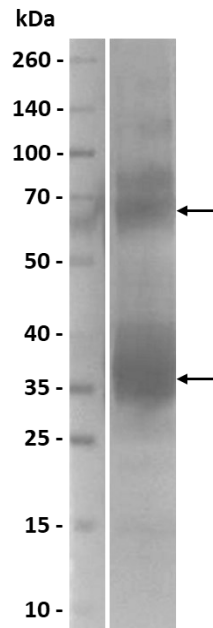


Figure 1. Western blot: Functional Western blot analysis to evaluate if the gp36 Fc protein can be detected by HIV-2 serum. One microgram of gp36 Fc protein under denaturing and reducing conditions was probed with HIV-2 patient serum at a 1: 2 000 dilution. Goat Anti-Human IgG (Fc-specific) HRP (Sigma Aldrich, A0170) at a 1: 5 000 dilution was used for detection. The expected protein band sizes of monomer gp36 Fc (~35 kDa) and dimer gp36 Fc (~65 kDa) were observed, with some additional non-specific bands that can be as a result of different glycoforms of the protein.

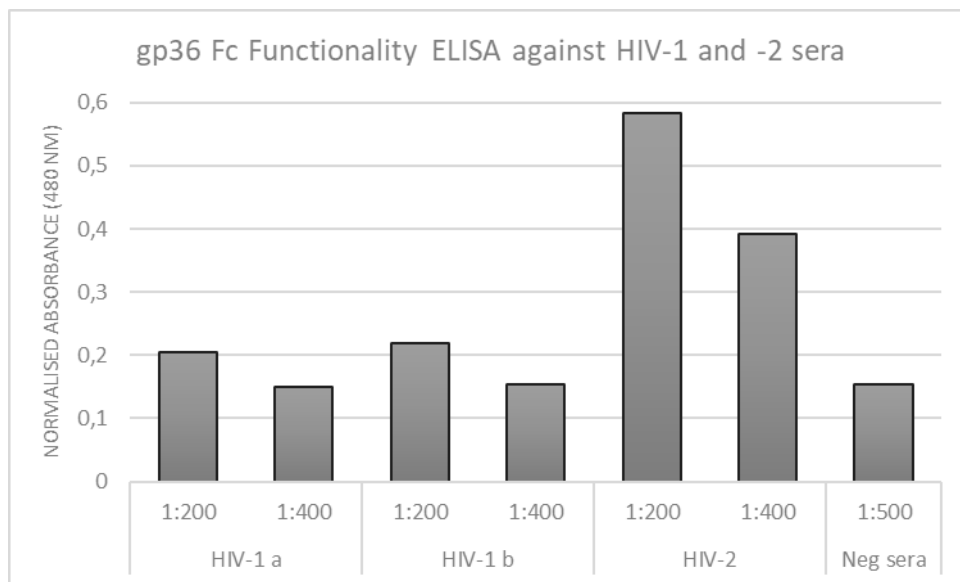


Figure 2. Indirect ELISA. ELISA analysis of gp36 Fc protein at 2 ng/μl probed with 1:200 and 1:400 dilution of patient HIV-1, HIV-2 and negative serum. A Goat Anti-Human IgG (Fc-specific) HRP (Sigma Aldrich, A0170) at a 1: 10 000 dilution was used for detection.