
Human Immunodeficiency Virus Type 1 gp41 Protein, Animal Free

No. :KF-ab0057

Expression Host: Nicotiana benthamiana plants

Clonality: N/A

Species and Isotype: Synonyms: HIV-1 envelope glycoprotein gp41; Sequence:

RLLALETLIQNQLLNWLGCKGRLVCYTSV; Tag: Mouse Fc IgG2a with hinge region; Molecular Weight

(kDa): Different glycoforms at ~31 - ~35 kDa on SDS-PAGE under reducing conditions.

Dimer commonly formed at ~65 kDa. Accession Number: This sequence was obtained from

Zouhair et al (2006) Group O Human Immunodeficiency Virus Type1 Infection That Escaped Detection in Two Immunoassays. Journal of Clinical Microbiology, 44(2):662 - 665.

doi:10.1128/JCM.44.2.662-665.2006.

Description: This product is a recombinant HIV-1 gp41 protein, fused to a Mouse Fc Tag. It was produced in Nicotiana benthamiana plants via Agrobacterium tumefaciens-mediated infiltration.

Verified Applications: Western blot, ELISA

Dilution Range: Western blot (1: 1 000-1: 2 000) ELISA (1: 1 000-1: 5 000)

Tested Species Reactivity : Verified Species Immunoglobulin Affinity: Human IgG1 (++++); Rabbit IgG (+++); Mouse IgG1 (+); Mouse IgG2a (++++); Alpaca IgG2b (++++)

Concentration : 0.25-0.5 mg/ml

Form : Liquid

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. Preservative: None

Purification Notes: This product was purified using Immobilised metal affinity chromatography (IMAC).

Purity: $\geq 85\%$ as determined by SDS-PAGE
97.06% as determined by Mass Spectrometry

General Notes: For Research Use only, unless otherwise indicated.

Image:

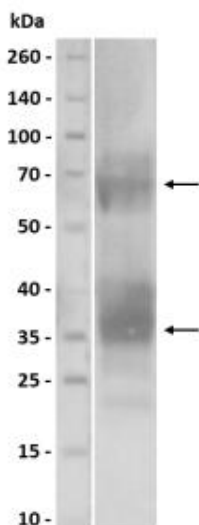


Figure 1. Functional Western blot analysis to evaluate if the gp41 Fc protein can be detected by HIV-1 serum. One microgram of gp41 Fc protein under denaturing and reducing conditions was probed with HIV-1 patient serum at a 1: 2 000 dilution. Goat AntiHuman IgG (Fc-specific) HRP (Sigma Aldrich, A0170) at a 1: 5 000 dilution was used for detection. The expected protein band sizes of monomer gp41 Fc (~35 kDa) and dimer gp41 Fc (~65 kDa) were observed, with some additional non-specific bands that can be a result of different glycoforms of the protein.

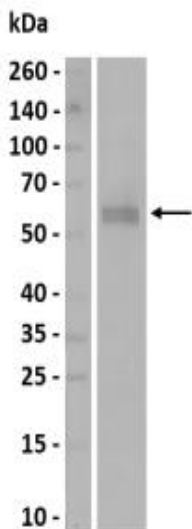


Figure 2. Specificity Western blot analysis. One microgram of gp41 Fc protein under denaturing and reducing conditions was probed with HIV-2 patient serum at a 1: 5 000 dilution. Goat Anti-Human IgG (Fc-specific) HRP (Sigma Aldrich, A0170) at a 1: 10000 dilution was used for detection. A protein band at the size of a gp41 Fc dimer (~65 kDa) was observed.