HIV-1 Gag p15

05-007　　20 μg,　　05-008　　100 μg

HIV-1 Gag p15 is processed by the digestion of its precursor Gag p55 by HIV-1 protease. This protein is further digested into nuclocapsid protein p7 and into p6 and p1 of unknown function. This digestion is promoted by the binding of HIV-1 genome RNA and the two Zn finger motifs that exist in the p7 region. The produced nucleocapsid protein p7 regulates the RNA function by directly binding to HIV-1 genome RNA (1).

The product is over-expressed as a recombinant protein in *E. coli* with a plasmid carrying the Gag p15 coding region of HIV-1 virus, subtype B (2), and highly purified by several steps of chromatography (3). Its molecular size is 15 kD, same as that of p15 purified from AIDS virus particles (Fig 1).

Usage

1) It can be used as a substrate for HIV-1 protease in the presence of HIV-1 genomic RNA.
2) It can be used in studies of structure and function of AIDS virus as precursor of nucleocapsid p7 protein that binds to HIV-1 genome RNA.
3) It can be used as p15 antigen in detection of anti-HIV-1 p15 antibody in Western blotting or ELISA.
4) It can be used as standard for the quantitative analysis of HIV-1 p15 antigen.

Specification

Purity: Over 90% by SDS-PAGE (CBB staining)

Protein concentration: 0.42 mg/ml as measured by BCA method

Form: 50% glycerol, 20 mM Tris-HCl (pH 7.5), 50 mM NaCl, 10 mM mercaptoethanol

Storage: -20℃

Reference:

1. Freed EO, Virology 251:1-15 (1998) Review
2. Adachi A, et al., J. Virol. 59, 284 (1986)
3. Saito A, et al., Microbiol. Immunol. 39:473-483 (1995)

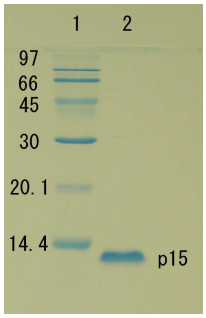

Fig. 1 Polyacrylamide gel electrophoresis of HIV-1 p15 protein

＜Distributed by ＞: SCETI K.K. DF Kasumigaseki Place, 3-6-7 Kasumigaseki, Chiyoda-ku Tokyo 100-0013 JAPAN
Tel: +81-3-5510-2347 Fax: +81-3-5510-0134
E-mail: exp-pet@sceti.co.jp URL: www.sceti.co.jp/export/
＜Manufactured by＞ : BioAcademia,Inc. 7-7-18 Saito-Asagi, Ibaraki, Osaka 567-0085, JAPAN