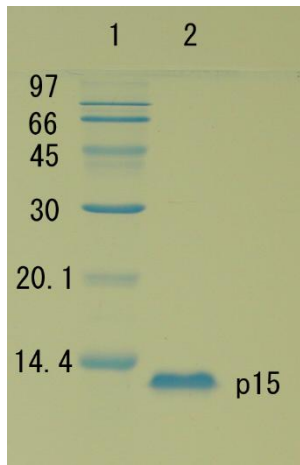


## HIV-1 Gag p15

<b>Product code</b>	05-007      05-008
<b>Size</b>	20 µg      100 µg
<b>Storage</b>	-20°C
<b>Product Description</b>	<b>HIV-1 Gag p15</b> was over-expressed as a recombinant protein in <i>E. coli</i> 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).
<b>Concentration</b>	0.42 mg/ml as measured by BCA method
<b>Buffer</b>	50% glycerol, 20mM Tris-HCl (pH7.5), 50mM NaCl, 10mM 2-mercaptoethanol
<b>Purity</b>	Over 90% by SDS-PAGE (CBB staining)
<b>Application</b>	<ol style="list-style-type: none"> <li>1. It can be used as a substrate for HIV-1 protease in the presence of HIV-1 genomic RNA.</li> <li>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.</li> <li>3. It can be used as p15 antigen in detection of anti-HIV-1 p15 antibody in Western blotting or ELISA.</li> <li>4. It can be used as a standard for the quantitative analysis of HIV-1 p15 antigen.</li> </ol>
<b>Background</b>	<b>HIV-1 Gag p15</b> is processed by digestion of its precursor Gag p55 by HIV-1 protease. This protein is further digested into nucleocapsid protein p7 and into p6 and p1 of unknown function. This digestion is promoted by 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).
<b>Data Image</b>	 <p><b>Fig.1 Polyacrylamide gel electrophoresis of HIV-1 p15 protein</b></p>
<b>Data Link</b>	GenBank: <a href="https://www.ncbi.nlm.nih.gov/nuclot/AAA44988.1">AAA44988.1</a>
Please note: All products are FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES. NOT FOR MILITARY USE.	

**References:** 05-007, 05-008 HIV-1 Gag p15

1. Freed EO "HIV-1 gag proteins: diverse functions in the virus life cycle." *Virology* **251**:1-15 (1998) PMID: [9813197](#)
2. Adachi A *et al* "Production of acquired immunodeficiency syndrome-associated retrovirus in human and nonhuman cells transfected with an infectious molecular clone." *J. Virol.* **59**: 284 -291(1986) PMID: [3016298](#)
3. Saito A *et al* "Overproduction, purification, and diagnostic use of the recombinant HIV-1 Gag proteins, the precursor protein p55 and the processed products p17, p24, and p15." *Microbiol. Immunol.* **39**:473-483 (1995) PMID: [8569532](#)

**Related products**

65-011 Anti-HIV-1 Gag p15 antibody, rabbit serum