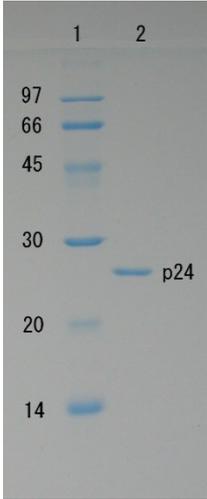


HIV-1 Gag p24

| | |
|--|--|
| Product code | 05-005 05-006 |
| Size | 20 µg 100 µg |
| Storage | -20°C |
| Product Description | This protein was over-expressed as a soluble recombinant protein in <i>E. coli</i> with a plasmid carrying the Gag p24 coding region of HIV-1 virus, subtype B (2), and highly purified by several steps of chromatography (3). Its molecular weight is 24 kD, same as that of p24 purified from HIV-1 virus particles (Fig 1). |
| Concentration | 1.0 mg/ml as measured by BCA method |
| Buffer | 50% glycerol, 20mM Tris-HCl (pH7.5), 50mM NaCl, 10mM 2-mercaptoethanol |
| Purity | Over 90% purity by SDS-PAGE (CBB staining) |
| Application | <ol style="list-style-type: none"> 1. In ELISA assay as a standard in titration of p24 antigens 2. As a standard for p24 in Western blotting. 3. It can be used in the studies of structure and function of HIV-1 virus as it constitutes HIV-1 core as a capsid protein since it is soluble under physiological conditions. |
| Background | HIV-1 Gag p24 is a capsid protein that constitutes the core of AIDS virus, HIV-1, and is produced by digestion of its precursor, Gag p55, by HIV-1 protease. This protein is indispensable for reproduction of AIDS virus and constitutes an essential element in the virus particle (1). As this protein is detectable from the early stage of AIDS virus infection, and reflects the amount of virus in the blood, it is used as a marker for observing the patient's condition during and after treatment. |
| Data Image |  <p>Fig.1 Polyacrylamide gel electrophoresis of HIV-1 p24 protein</p> |
| Data Link | UniProtKB P12497 (POL_HV1N5) |
| Please note: All products are FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES. NOT FOR MILITARY USE. | |

References: 05-005, 05-006 HIV-1 Gag p24

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. Tanaka N *et al* "A simple method for overproduction and purification of p24 Gag protein of human immunodeficiency virus type 1." *Microbiol Immunol* **36**: 823-831 (1992) PMID: [1474933](#)
4. 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

65-004 Anti-HIV-1 Gag p24 antibody, rabbit serum

65-023 Anti-HIV-1 Gag p24 antibody, rabbit polyclonal

65-006 Anti-HIV-1 Gag p24 antibody, guinea pig polyclonal