

HIV p24 Monoclonal Mouse Antibody (p24/661)



Product Description

Human immunodeficiency virus (HIV) is a retrovirus that causes acquired immune deficiency syndrome (AIDS), a condition in humans in which the immune system begins to fail, leading to life-threatening opportunistic infections. HIV mainly infects vital cells in the human immune system such as helper T cells (specifically CD4 T cells), macrophages and dendritic cells. Two species of HIV infect humans: HIV-1 and HIV-2, with HIV-1 being the more virulent strain. The gag gene of human immunodeficiency virus 1 (HIV-1) encodes a precursor protein known as Pr55Gag. The viral protease PR cleaves this precursor to generate p17, p24, p7, and p6 proteins, which are required for virus particle assembly. HIV-1 Gag p24 is a capsid protein that constitutes the core of AIDS virus HIV-1. p6 and p7 are the components of the nucleocapsid, and p17 provides a protective matrix. HIV-1 Gag p24 is indispensable to the reproduction of AIDS virus and constitutes an essential element for the AIDS virus particle construction. As this protein is detectable from the early stage of AIDS virus infection, its measurement is commonly used as an indicator of HIV-1 infection and viral load.

Primary antibodies are available purified, or with a selection of fluorescent CF® dyes and other labels. CF® dyes offer exceptional brightness and photostability. See the [CF® Dye Brochure](#) for more information. Note: Conjugates of blue fluorescent dyes like CF®405S and CF®405M are not recommended for detecting low abundance targets, because blue dyes have lower fluorescence and can give higher non-specific background than other dye colors.

Stock status: Because Biotium offers a large number of antibody and conjugation options, primary antibody conjugates may be made to order. Typical lead times are up to one week for CF® dye and biotin conjugates, and up to 2-3 weeks for fluorescent protein and enzyme conjugates. Please email order@biotium.com to inquire about stock status and lead times before placing your order.

Catalog number key for antibody number 0661, Anti-HIV p24 (p24/661)

Product attributes

| | |
|---------------------------------------|---|
| Antibody number | #0661 |
| Antibody reactivity (target) | HIV p24 |
| Antibody type | Primary |
| Host species | Mouse |
| Clonality | Monoclonal |
| Clone | p24/661 |
| Isotype | IgG1, kappa |
| Molecular weight | 24 kDa (mature); 55 kDa & 41 kDa (precursors) |
| Synonyms | Capsid protein p24; Human immunodeficiency virus type 1 p24; HIV1gp1; HIV-1 Gag p24 |
| Entrez gene ID | 155348 (HIV-1) |
| SwissProt | P04585 (HIV-1) |
| Unigene | Not Applicable |
| Immunogen | Recombinant HIV-1 Gag p24 protein |
| Species reactivity | HIV Type 1 |
| Antibody application notes | For coating for ELISA, order Ab without BSA, Higher concentration may be required for direct detection using primary antibody conjugates than for indirect detection with secondary antibody, Optimal dilution and staining procedure for a specific application should be determined by user. Recommended starting concentrations for titration are 1-2 ug/mL for most applications, or 1 ug/million cells/100 uL for flow cytometry |
| Positive control | HIV-1 infected cells or tissues. |
| Shipping condition | Room temperature |
| Storage Conditions | Store at 2 to 8 °C, Protect fluorescent conjugates from light, Note: store BSA-free antibodies at -10 to -35 °C |
| Shelf life | Guaranteed for at least 24 months from date of receipt when stored as recommended |
| Regulatory status | For research use only (RUO) |
| Antibody/conjugate formulation | Conjugates: 0.1 mg/mL in PBS/0.1% BSA/0.05% azide, HRP conjugates: 0.1 mg/mL in PBS/0.05% BSA, Purified: 0.2 mg/mL in PBS/0.05% BSA/0.05% azide, Purified, BSA-free: 1 mg/mL in PBS without azide |
| Antibody research areas | Infectious disease, Virology |
| Product origin | Product may contain either bovine serum albumin (BSA) from bovine serum (Bos taurus), or recombinant BSA produced in Chinese hamster ovary cells. Inquire for the specific lot. |

| Antibody # prefix | Conjugation | Ex/Em (nm) | Laser line | Detection channel | Dye Features |
|-------------------|--------------------|------------|------------|--------------------------|----------------------------------|
| BNC04 | CF®405S | 404/431 | 405 | DAPI (microscopy), AF405 | CF®405S Features |
| BNC88 | CF®488A | 490/515 | 488 | GFP, FITC | CF®488A Features |
| BNC68 | CF®568 | 562/583 | 532, 561 | RFP, TRITC | CF®568 Features |
| BNC94 | CF®594 | 593/614 | 561 | Texas Red® | CF®594 Features |
| BNC40 | CF®640R | 642/662 | 633-640 | Cy®5 | CF®640R Features |
| BNC47 | CF®647 | 650/665 | 633-640 | Cy®5 | CF®647 Features |
| BNC74 | CF®740 | 742/767 | 633-685 | 775/50 | CF®740 Features |
| BNCB | Biotin | N/A | N/A | N/A | |
| BNUB | Purified | N/A | N/A | N/A | |
| BNUM | Purified, BSA-free | N/A | N/A | N/A | |

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This datasheet was generated on November 21, 2024 at 08:24:09 AM. Visit product page to check for updated information before use. Product link: <https://biotium.com/product/monoclonal-anti-p24-hiv-p24661/>