

# 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](mailto: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

Antibody # prefix	Conjugation	Ex/Em (nm)	Laser line	Detection channel	Dye Features
BNC04	CF®405S	404/431	405	DAPI (microscopy), AF405	<a href="#">CF®405S Features</a>
BNC88	CF®488A	490/515	488	GFP, FITC	<a href="#">CF®488A Features</a>
BNC68	CF®568	562/583	532, 561	RFP, TRITC	<a href="#">CF®568 Features</a>
BNC94	CF®594	593/614	561	Texas Red®	<a href="#">CF®594 Features</a>
BNC40	CF®640R	642/662	633-640	Cy®5	<a href="#">CF®640R Features</a>
BNC47	CF®647	650/665	633-640	Cy®5	<a href="#">CF®647 Features</a>
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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