abcam

ab66641

Anti-HIV1 p17 antibody [17-1]

Key facts

Isotype	IgG2b
Host species	Mouse
Storage buffer	Preservative: 0.1% Sodium azide Constituents: PBS
Form	Liquid
Clonality	Monoclonal
Clone number	17-1
Purification technique	Affinity purification Protein G
Specificity	ab66641 recognises bacterial HIV1 P17 Gag protein
Light chain type	kappa
Concentration	1 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

IP

Expected

Species	Human immunodeficiency virus
Dilution info	Use at an assay dependent concentration.
Notes	-

Flow Cyt

Expected

Species	Human immunodeficiency virus
Dilution info	-
Notes	ab170192 - Mouse monoclonal IgG2b, is suitable for use as an isotype control with this antibody.

WB

Expected

Species	Human immunodeficiency virus
Dilution info	1/5000
Notes	-

ICC/IF

Expected

Species	Human immunodeficiency virus
Dilution info	Use at an assay dependent concentration.
Notes	-

Target data

See full target information HIV1 p17

Storage

Shipped at conditions	Blue Ice
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	-20°C
Aliquoting information	Upon delivery aliquot

Storage information	Avoid freeze / thaw cycle

Supplementary info

This supplementary information is collated from multiple sources and compiled automatically.

Activity summary	HIV1 p17 also known as matrix protein is a structural component of the Human Immunodeficiency Virus type 1 (HIV-1). It has a molecular mass of approximately 17 kDa. The protein is expressed in the virion as part of the gag polyprotein precursor. HIV1 p17 plays an important role in the initial assembly and budding of new virions by stabilizing the capsid structure. Its localization at the inner surface of the viral membrane assists in maintaining structural integrity ensuring successful viral replication and transmission.
Biological function summary	HIV1 p17 functions by interacting with the host cell's machinery playing a pivotal role in viral replication. The matrix domain of the HIV virus is not a functional standalone entity; it is part of the gag polyprotein complex that also includes capsid and nucleocapsid proteins. This complex facilitates the incorporation of viral RNA into forming virions ensuring the viral genome is packaged correctly for delivery into new host cells. HIV1 p17 contributes to this interaction by binding to host cell membranes a necessary step for the viral replication cycle.
Pathways	The HIV1 p17 protein engages in the HIV-1 life cycle pathway intimately associated with viral entry and assembly processes. It plays an essential role in the viral budding pathway driving the assembly and release of the virus from host cells. Notably p17 interacts with the host’s PI3K/Akt signaling pathway which is important for promoting cell survival and enhancing viral replication efficiency. Additionally it relates to the envelope glycoprotein gp120 that facilitates viral entry by binding to CD4 and co-receptors on host cells.
Associated diseases and disorders	HIV1 p17 has a significant connection to Acquired Immunodeficiency Syndrome (AIDS) a condition resulting from the chronic infection with HIV. The protein's role in the assembly and stability of the virion directly influences the progression of HIV infection to AIDS. Researchers have observed p17’s involvement with overactive immune response implications possibly contributing to immunological disorders associated with HIV. Furthermore it interacts with the p24 protein another vital gag component which serves as a marker in the diagnosis and monitoring of HIV infection progression.

Product promise

Tested

We have tested this species and application combination and it works. It is covered by our product promise.

Expected

We have not tested this specific species and application combination in-house, but expect it will work. It is covered by our product promise.

Predicted

This species and application combination has not been tested, but we predict it will work based on strong homology. However, this combination is not covered by our product promise.

Not recommended

We do not recommend this combination. It is not covered by our product promise.

We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

In the unlikely event of one of our products not working as expected, you are covered by our product promise.

Full details and terms and conditions can be found here:
Terms & Conditions.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.