abcam

ab324727

Anti-HIV gp160 V3-glycan antibody [DH270.6] - BSA and Azide free

Recombinant | Advanced Validation

Key facts

Isotype	IgG1
Host species	Human
Storage buffer	pH: 7.2 - 7.4 Constituents: PBS
Form	Liquid
Clonality	Monoclonal
Immunogen	The exact immunogen used to generate this antibody is proprietary information.
Carrier free	Yes
Clone number	DH270.6
Purification technique	Affinity purification Protein A
Concentration	1.052 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

Flow Cyt

Tested

Species	Transfected cell line - Human immunodeficiency virus
Dilution info	1/500

Notes	-

Expected

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

Not recommended

Species	Recombinant fragment - Human immunodeficiency virus
Dilution info	-
Notes	-

I-ELISA

Tested

Species	Recombinant fragment - Human immunodeficiency virus
Dilution info	13.7 ng/mL
Notes	-

Expected

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

Not recommended

Species	Transfected cell line - Human immunodeficiency virus
Dilution info	-
Notes	-

FuncS

Tested

Species	Human immunodeficiency virus
Dilution info	-
Notes	-

Not recommended

Species	Transfected cell line - Human immunodeficiency virus, Recombinant fragment - Human immunodeficiency virus
Dilution info	-
Notes	-

Target data

See full target information HIV gp160

Storage

Shipped at conditions	Blue Ice
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	+4°C

Notes

What are the advantages of a recombinant monoclonal antibody?
This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility
- Improved sensitivity and specificity
- Long-term security of supply
- Animal-free batch production

For more information, read more on recombinant antibodies.

Conjugation ready
Our carrier-free antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.

Use our conjugation kits for antibody conjugates that are ready-to-use in as little as 20 minutes with 1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.

Compatibility
This product is compatible with the Maxpar® Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar® is a trademark of Fluidigm Canada Inc.

Want a custom formulation?
This antibody clone is manufactured by Abcam. If you require a custom buffer formulation or conjugation for your experiments, please contact orders@abcam.com

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

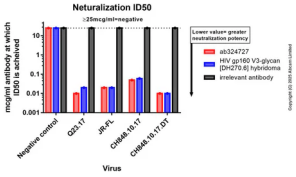
We do not recommend this combination. It is not covered by our product promise.

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.

4 product images



Functional Studies - Anti-HIV gp160 V3-glycan antibody [DH270.6] - BSA and Azide free (ab324727)

Neutralization methods:

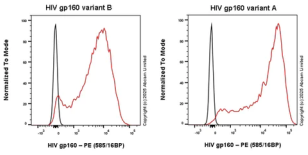
Env-pseudotyped virus neutralization assays completed were measured as a function of reductions in luciferase (Luc) reporter gene expression after a single round of infection in TZM-bl cells (Montefiori 2009; Li 2005). TZM-bl cells (also called JC57BL-13) were obtained from the NIH AIDS Research and Reference Reagent Program, as contributed by John Kappes and Xiaoyun Wu.

Briefly, a pre-titrated dose of virus was incubated with serial dilutions of antibodies in duplicate for 1hr at 37°C in 96-well flat-bottom culture plates, followed by addition of freshly trypsinized cells. One set of control wells received cells + virus (virus control) and another set received cells only (background control). After 48-72hrs of incubation, cells were lysed and measured for luminescence using the Britelite Luminescence Reporter Gene Assay System (PerkinElmer Life Sciences). ID50 and ID80 neutralization titers are the concentration at which relative luminescence units (RLU) were reduced by 50% or 80% compared to virus control wells after subtraction of background RLUs from cell controls. Maximum Percent Inhibition (MPI) is the percent neutralization at the lowest dilution of antibody tested.

Values are the antibody concentration (ug/ml) which relative luminescence unit (RLUs) were reduced 50% compared to virus control and max percent inhibition (MPI).

Neutralization assay confirm that the anti-HIV gp160 V3-glycan (ab324727) broadly neutralizing the different HIV strains.

Negative control: SVA-MLV: Simian Virus A (SVA) lentivirus pseudotyped with Murine Leukemia Virus (MLV) envelope, Q23.17: HIV-1 Env variant Q23.17, JR-FL: HIV-1 isolate JR-FL, CH848.10.17: HIV-1 envelope (Env) protein variant A, CH848.10.17.DT: HIV-1 envelope (Env) protein variant B.



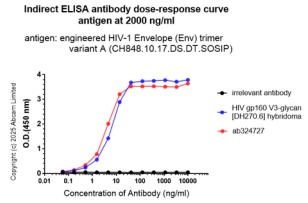
Flow Cytometry - Anti-HIV gp160 V3-glycan antibody [DH270.6] - BSA and Azide free (ab324727)

HIV gp160 V3-glycan Flow Cytometry staining using human Anti-HIV gp160 V3-glycan antibody

Flow cytometric analysis of 293-F (human embryonic kidney epithelial cell) transfected with HIV gp160 variant A (CH848.10.17.DS.DT.gp160) (Right) 293-F transfected with HIV gp160 variant B (CH848.10.17.DS.gp160) (Left) cells labelling HIV gp160 with ab324727 at 1/500 dilution (0.2ug) (Red) compared with a isotype control and an unlabelled control (cells without incubation with primary antibody and secondary antibody).

Goat anti-Human IgG (PE, 0.5mg/ml) at 1/200 dilution was used as the secondary antibody.

Gated on viable cells.
Cells were stained with an irrelevant antibody (black line) or ab324727 (red line) at 1:500 dilution.
Secondary antibody an anti-human IgG conjugate to PE (2.5ug/mL).
Data kindly provided by the Duke Human Vaccine Institute.
HIV gp160 variant A and B are different constructs stabilizing the transmembrane gp160 as described in this paper (PMID: 35294883).



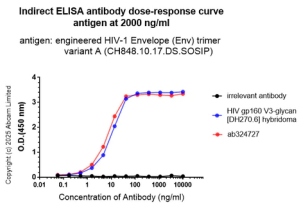
Indirect ELISA - Anti-HIV gp160 V3-glycan antibody [DH270.6] - BSA and Azide free (ab324727)

Indirect ELISA analysis of ab324727 at 10000-0 ng/ml. The Secondary antibody used was HRP conjugated goat anti-human secondary antibody at 1:15000 dilution dilution.

Antigen: engineered HIV-1 Envelope (Env) trimer variant A (CH848.10.17.DS.DT.SOSIP).

Antigen concentration: 2000 ng/ml

Data kindly provided by the Duke Human Vaccine Institute. engineered HIV-1 Envelope (Env) trimer variant A and B are engineered HIV-1 Envelope (Env) trimer specifically designed with stabilizing mutations as described in this paper PMID: 35294883.



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