Lipophilicity is a key factor to increase the antiviral activity of HIV neutralizing antibodies

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HIV-1 Antibodies conjugated to cholesterol

Where are the cholesterol-conjugated antibodies located? At the membrane?

Was the antibody-membrane affinity improved?
HIV-1 Antibodies conjugated to cholesterol

Conjugation of cholesterol to broad neutralizing antibodies increases membrane affinity and their antiviral activity.

TARGET CELL

HIV-1

Viral membrane

High affinity

Low affinity

Lipid Raft

TM - Transmembrane domain; MPER - Membrane Proximal External Region; CHR - C-terminal Heptad Repeat; NHR - N-terminal Heptad Repeat; FP - Fusion Peptide; gp41 - Glycoprotein 41

Acknowledgments

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