

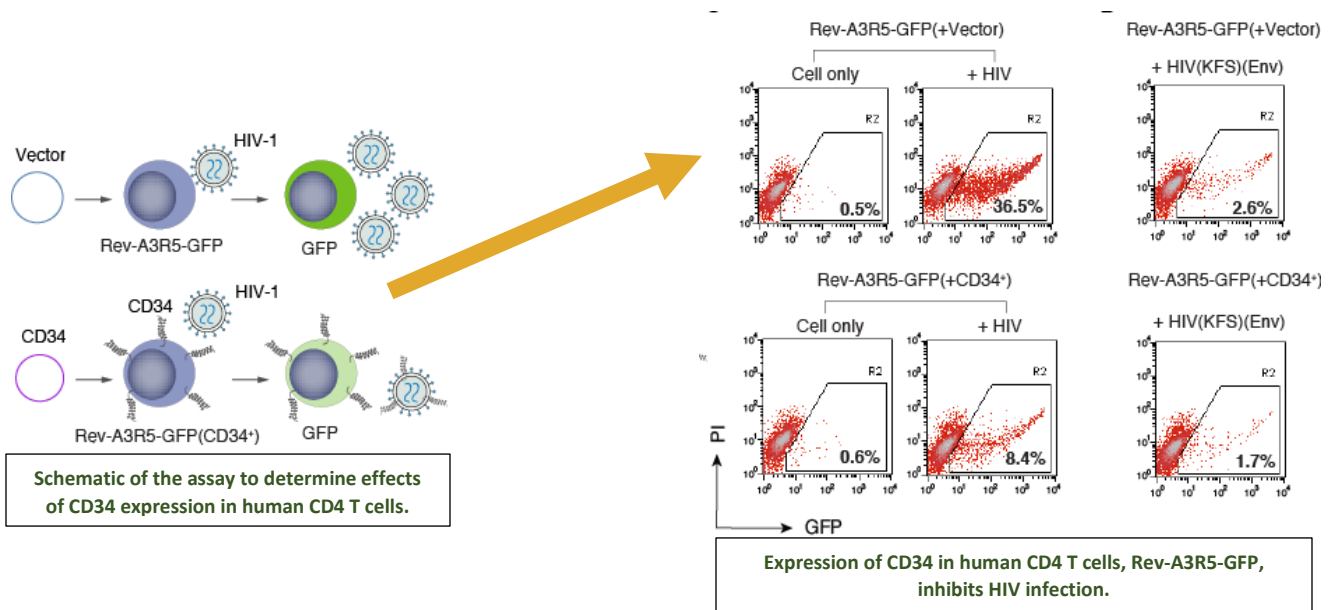
EMPOWERING CELLS TO FIGHT VIRUSES: HARNESSING THE NATURAL DEFENSE OF CD34

Mason’s innovative research has revealed the antiviral properties of CD34, a common marker of stem and progenitor cells. CD34 has been shown to inhibit the replication and infectivity of HIV-1 and other retroviruses through virion incorporation, sterically hindering the virus’s ability to attach to and infect target cells. This discovery highlights CD34 as a potential innate immune defense mechanism that protects stem and progenitor cells from viral dissemination.

Key Features

- **Antiviral Functionality:** CD34 limits viral replication and spreading by incorporating into virions, reducing the virus’s ability to infect other cells
- **Broad-Spectrum Activity:** Effective against HIV-1 and other retroviruses, demonstrating the potential for broad antiviral applications
- **Innate Immunity:** Suggests a natural protective role for stem/progenitor cells against viral infections, which could have implications for both therapeutic and prophylactic interventions
- **Potential for Clinical Use:** This technology has the potential lead to new antiviral therapies, particularly for HIV, by harnessing or enhancing the activity of CD34 in immune cells

This breakthrough opens new avenues for research and development in antiviral treatments.



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