

Novel Anti-HIV Compounds Using Peptides or Peptide Mimetics

Summary (1024-character limit)

Novel class of anti-HIV compounds that inhibit viral recognition process and nuclear export activity.

NIH Reference Number

E-019-2014

Product Type

- Diagnostics
- Therapeutics

Keywords

- Anti-viral
- HIV

Collaboration Opportunity

This invention is available for licensing.

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Description of Technology

The subject invention describes a new class of compounds (such as peptides or mimetics) that target viral RNAs and inhibit the viral life cycle by blocking the viral recognition process. More specifically, these compounds are the first against an RNA Target - currently there are no clinical drugs against RNA targets in the treatment of any type of human disease. Anti-HIV drugs currently on the market are complicated by the development of resistance and substantial side-effects; however, these compounds would unlikely develop any side effects because of their very high specificity against only viral RNA. In addition, these compounds may be further linked to a detectable label. Thus, these compounds have the potential to be used as a new class of systemic drugs for the treatment of HIV infection and to be developed into diagnostic kits or devices.

Potential Commercial Applications

- Anti-viral HIV therapeutic

- HIV Diagnostic

Competitive Advantages

- New class of compound
- Inhibits the viral recognition process and nuclear export activity
- High specificity only to HIV RNA
- Ease of permeability through cell membrane because compound is positively charged.

Inventor(s)

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Development Stage

- Discovery (Lead Identification)

Publications

Fang X, et al. [[PMID 24243017](#)]

Patent Status

- **U.S. Patent Filed:** U.S. Patent Application Number 61/894,849, Filed 23 Oct 2013

Related Technologies

- [E-119-2013 - Method and Device for Selectively Labeling RNA](#)

Therapeutic Area

- Infectious Diseases