

Serum-Stable Peptide Linkers for Protease-Activated Antibiotic Prodrugs Targeting Multidrug-Resistant Bacteria

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TECHNOLOGY DESCRIPTION

This innovative therapeutic platform focuses on serum-stable peptides optimized to selectively cleave in the periplasmic extracts of *A. baumannii*, a top-priority pathogen identified by WHO. By enabling controlled antibiotic release inside bacterial cells, this technology addresses the critical challenge of developing protease-activated antibiotics that maintain stability in serum while targeting infection sites. Leveraging a novel strategy using substrate phage display, over 200 peptide candidates have been identified, with demonstrated efficacy and improved serum stability. With potential applications for combating multidrug-resistant *A. baumannii* infections, this breakthrough technology is poised to transform the field of antibiotic development and fulfill urgent global healthcare needs.

RELATED MATERIALS

- ▶ [Platform to Discover Protease-Activated Antibiotics and Application to Siderophore–Antibiotic Conjugates](#), PMID: PMC7790458, PMID: 33301681. - 12/10/2020

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OTHER INFORMATION

KEYWORDS

Novel Antibiotic Platforms,
Substrate Phage Display
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Priority Pathogen Solutions,
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CATEGORIZED AS

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