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Author: Basil Mathew Ramakrishnan Nagaraj

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## ACCEPTED MANUSCRIPT

## Antimicrobial activity of human α-defensin 5 and its linear analogs: N-terminal fatty acylation results in enhanced antimicrobial activity of the linear analogs

**Basil Mathew and Ramakrishnan Nagaraj\*** 

## CSIR-Centre for Cellular and Molecular Biology, Uppal Road, Hyderabad 500 007,

India

\*Author for correspondence: Ramakrishnan Nagaraj

Address: Centre for Cellular and Molecular Biology,

Uppal Road, Hyderabad 500 007, India,

Tel: +91-40-27192589

Fax:+91-40-27160591

Email: nraj@ccmb.res.in

Highlights

- > Cysteine deletions attenuates antibacterial activity of HD5
- > Requirements for candidacidal activity of HD5 are less stringent
- > Fatty acylation enhances antimicrobial activity of linear defensin analogs
- > Folded conformation of HD5 favors interaction with bacterial surfaces and DNA

Abstract

Human  $\alpha$ -defensin 5 (HD5) exhibits broad spectrum antimicrobial activity and plays an important role in mucosal immunity of the small intestine. Although there have been several studies, the structural requirements for activity and mechanism of bacterial killing is yet to be established unequivocally. In this study, we have investigated the antimicrobial Download English Version:

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