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### ACCEPTED MANUSCRIPT

# The anuran skin peptide bradykinin mediates its own absorption across epithelial barriers of the digestive tract.

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#### Highlights

- Skin secreted bradykinin by frogs does not require absorption enhancing peptides for its uptake across epithelial barriers of the gut
- Bradykinin increases the permeability of two cell models of the digestive tract at biologically relevant concentrations.
- This increase in permeability is independent of pore or vesicle formation in epithelial cell membranes.

#### Abstract

When faced with a potential predator, a wide range of frog species secrete a mixture of peptide toxins from their skin to defend themselves. We have recently shown that antimicrobial peptides (AMPs) in

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