

## ABSTRACT

5 Screening libraries of peptides in different assays offers an opportunity to simultaneously interrogate intracellular signaling pathways, create reagents to further the understanding of the pathway, and to create novel forms of therapies.

Many, if not all, biologically active peptides (e.g. peptide hormones) have profound effects both in health and disease, either by growth stimulating roles, growth inhibitory roles, or the  
10 regulation of critical metabolic pathways.

The present invention is directed to novel bioactive peptides, an *in silico* method to identify these peptides and a peptide library containing these peptides.