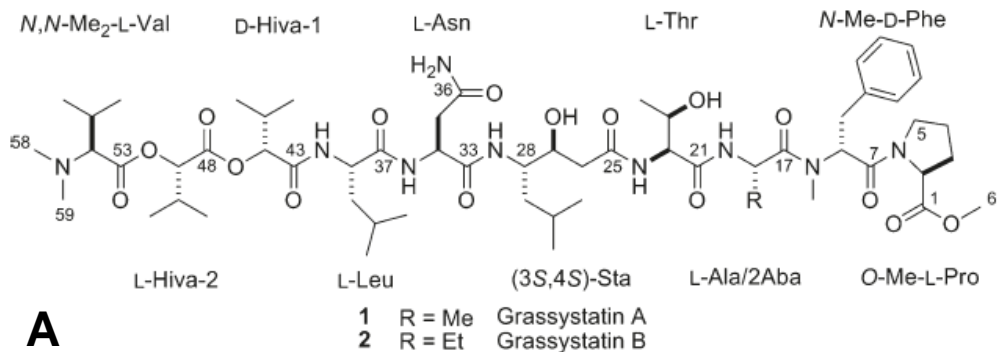


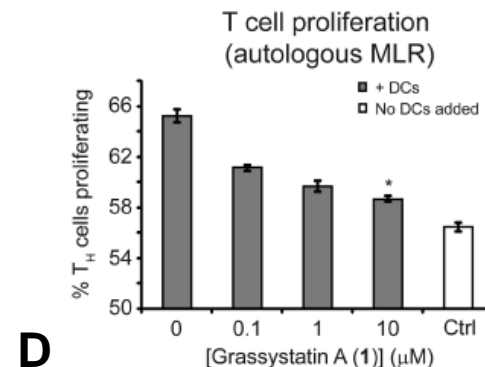
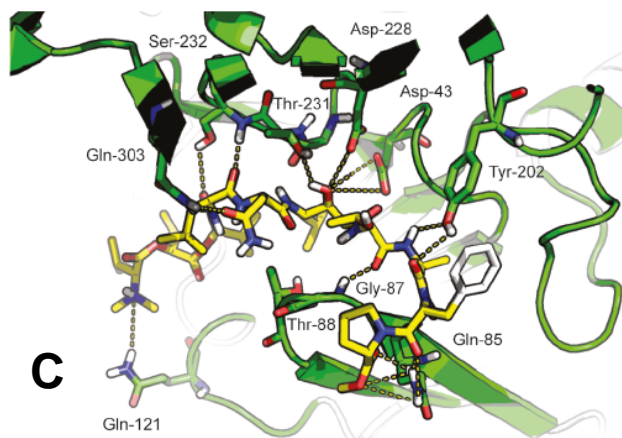
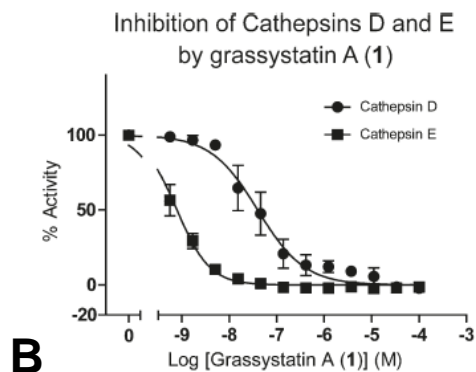
Grassystatins A–C from Marine Cyanobacteria, Potent Cathepsin E Inhibitors That Reduce Antigen Presentation

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High field NMR spectrometers at the AMRIS facility, UF were used to determine the structures of the natural products grassystatins A–C (**A**). We screened grassystatin A against a panel of proteases, a class of enzymes which are emerging as important drug targets. This revealed that the compound potently and selectively inhibits cathepsins D and E (**B**). Potential binding modes to these enzymes were investigated through *in silico* docking (**C**), and it was found that grassystatin A can inhibit downstream effects of antigen presentation, a process thought to involve cathepsin E (**D**).



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