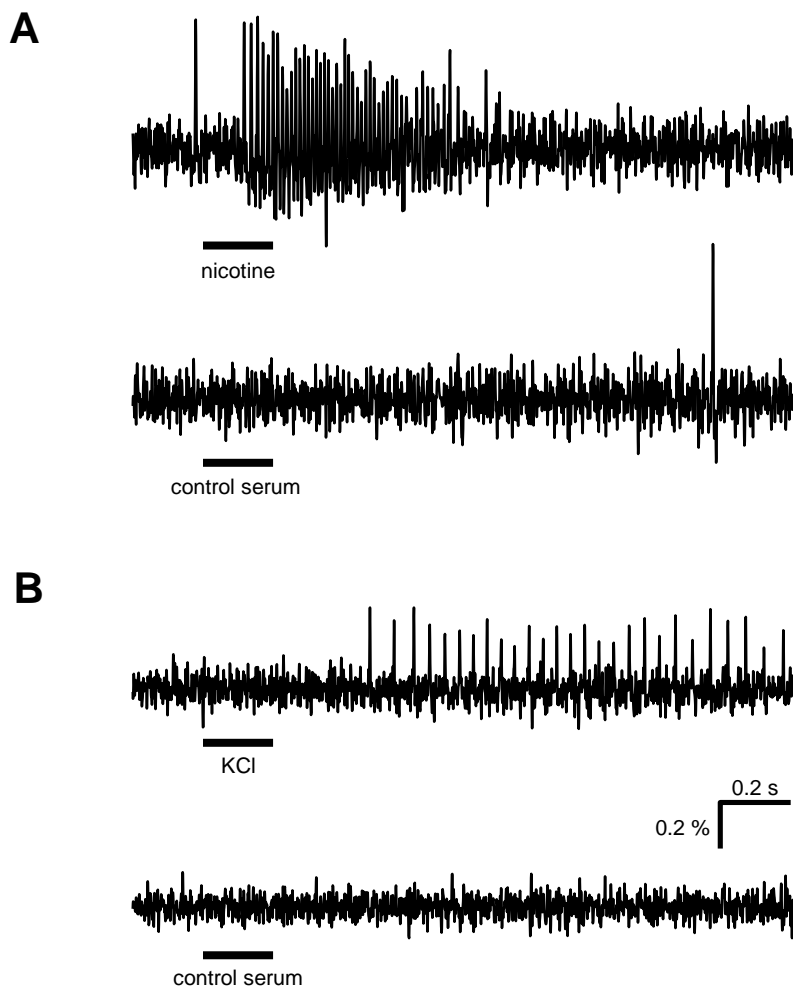


Figure e-1



Healthy control sera have only negligible excitatory effects on human submucous neurons

(A) Enteric nervous system neurons of the human submucous plexus were loaded with the voltage sensitive dye DI-8-ANEPPS and electrical activity was recorded as changes in fluorescence intensity ($\Delta F/F$). Top trace shows the excitatory effect of nicotine (application for 200 ms, black bar), demonstrating the viability of the neuron. Second trace shows only negligible effect of a healthy control serum (one action potential). (B) Similar results were obtained with serum from another healthy control. Top trace demonstrates viability of the neuron by application of KCl (100 mM, 200 ms, black bar). Second trace shows no response to the application of the control serum. Scale bars in (B) apply to all traces.