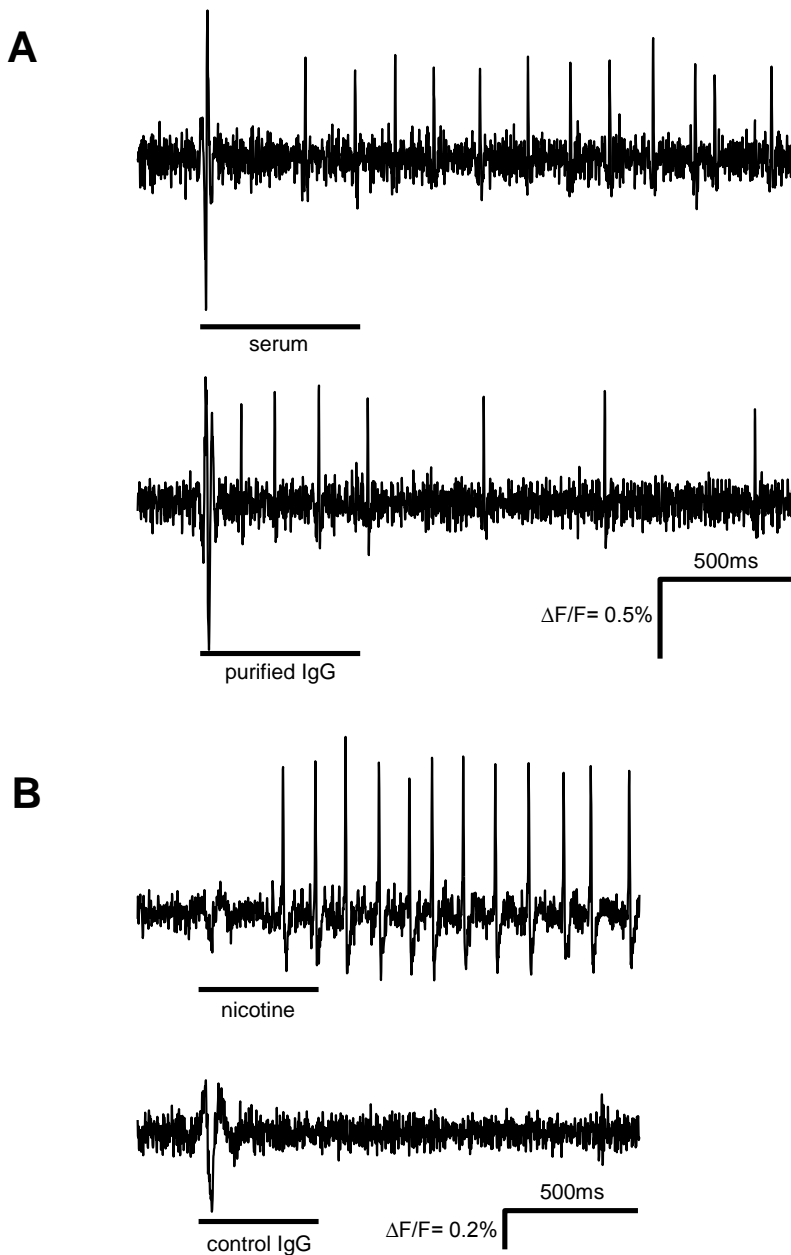


## Figure e-2



### **Serum and purified IgG from anti-DPPX encephalitis have similar excitatory effects on human submucous neurons while purified IgG from a control has no effect**

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 ( $\Delta F/F$ ).

(A) Top trace shows the excitatory effect of patient serum (1:1, 600 ms, black bar). Second trace shows similar effect of purified patient IgG in the same neuron (1:1, 600 ms).

(B) Top trace demonstrates viability of an enteric neuron by application of nicotine (100  $\mu\text{M}$ , 400 ms, black bar). Second trace shows no response in the same neuron to the application of purified IgG from a control (1:1, 400 ms).

Vertical deflections in the baseline during application of substances are due to slight movement artefacts of the ganglia.