EK1C4 is a lipopeptide that potently inhibits SARS-CoV-2 (and other human coronaviruses, HCoV) fusion with target cells. The ability of EK1C4 to inhibit Spike-ACE2-dependent cell fusion was validated using InvivoGen’s SARS-CoV2-Spike cell fusion assay (Figure 1). EK1C4 is more potent than EK1, from which it is derived, at inhibiting Spike-mediated cell fusion. Of note, its inhibitory potency depends on the Spike variant. Lower concentrations of EK1C4 are required to inhibit cell fusion mediated by the Wuhan (original) Spike (Figure 1A) than cell fusion mediated by the Delta (B.1.617.2) Spike (Figure 1B).

### Dose-dependent inhibition of cell-cell fusion

**A. Wuhan (original) Spike**

![Graph showing dose-dependent inhibition of cell-cell fusion for Wuhan (original) Spike](image)

**B. Delta Spike**

![Graph showing dose-dependent inhibition of cell-cell fusion for Delta Spike](image)

**Figure 1: EK1C4 is a potent inhibitor of SARS-CoV-2 Spike-mediated fusion between cells.**

293-hMyD88 cells were transfected with expression plasmids encoding either the Wuhan (original) or Delta (B.1.617.2) Spike variant. 293-hMyD88-Spike “donor” cells were co-cultured with HEK-Blue™ hACE2 “acceptor” cells in the presence of increasing concentrations of EK1C4 or EK1. After overnight incubation, the neutralizing ability of EK1C4 and EK1 was determined by measuring the reduction of SEAP production in the supernatant using the QUANTI-Blue™ Solution detection reagent. Data are shown as a percentage (%) of maximal inhibition of cell-cell fusion.