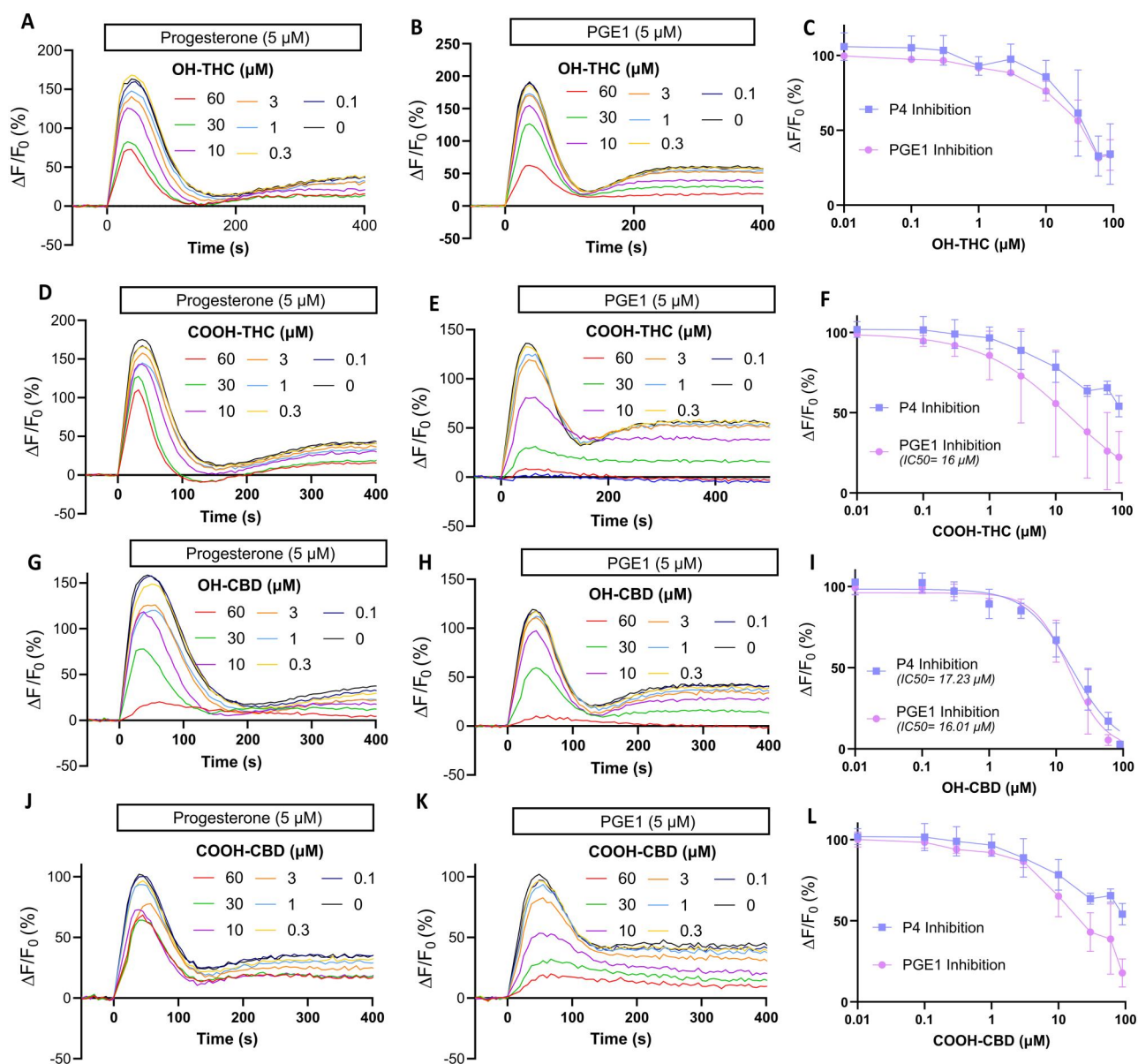




Supplementary Figure S2. The inhibitory effect of delta-9-tetrahydrocannabinol (THC)- and cannabidiol (CBD) metabolites on progesterone (P4)- and prostaglandin E1 (PGE1)-induced Ca^{2+} influx in human sperm. Representative Ca^{2+} signals evoked by application of P4 (5 μM) or PGE1 (5 μM) after incubation of Fluo-4 AM-loaded sperm cells with increasing concentrations of (A, B) 11-hydroxy- Δ^8 -THC (OH-THC), (D, E) 11-Nor- Δ^9 -carboxy THC (COOH-THC), (G, H) 7-hydroxy CBD (OH-CBD), and (J, K) 7-carboxy CBD (COOH-CBD). $\Delta F/F_0$ (%) indicates the percentage change in fluorescence (ΔF) with respect to the mean basal fluorescence (F_0) before application and subsequent continuous presence (indicated by the white bar) of P4 (5 μM) or PGE1 (5 μM). The results were used to generate sigmoidal curves and determine the half-maximal inhibitory concentrations (IC_{50}) values for (C) OH-THC, (F) COOH-THC, (I) OH-CBD, and (L) COOH-THC ($n > 3$). For the P4 inhibition by OH-THC and COOH-THC, we could not fit a sigmoidal curve since there is very little inhibition; a line connecting the dots is therefore shown. This also applies to P4 and PGE1 inhibition by COOH-CBD. Dots in panels (C), (F), (I), and (L) represent mean values $\pm$ SD.