Table S1. Effects of YM254890 on progesterone (P_4)-induced rhythmic contractions in the quiescent myometrium. Progesterone is used at the concentration of 5×10^{-6} M. Relative ratio of the peak areas (RRPAs) of the vehicle and YM254890 groups are presented as mean ± sd in each period. n: numbers of myometrial strips.

Time (min) Group	0~5	5~10	10~15	15~20
Vehicle + P_4 (n=18)	0.50 ± 0.18	0.67 ± 0.18	0.63 ± 0.17	0.52 ± 0.12
YM-254890 5×10^{-11} M + P_4 (n=8)	0.47 ± 0.19	0.69 ± 0.15	0.62 ± 0.10	0.57 ± 0.13
YM-254890 10^{-10} M + P_4 (n=8)	0.57 ± 0.21	0.65 ± 0.17	0.59 ± 0.16	0.52 ± 0.14
YM-254890 5×10^{-10}M + P_4 (n=8)	0.49 ± 0.17	0.64 ± 0.12	0.58 ± 0.12	0.49 ± 0.12
YM-254890 10^{-9} M + P_4 (n=8)	0.45 ± 0.27	0.59 ± 0.27	0.55 ± 0.22	0.49 ± 0.21
YM-254890 5×10^{-9} M + P_4 (n=14)	0.21 ± 0.15	0.35 ± 0.25	0.32 ± 0.24	0.28 ± 0.21
YM-254890 10^{-8} M + P_4 (n=14)	0.05 ± 0.09	0.14 ± 0.19	0.12 ± 0.19	0.08 ± 0.16
YM-254890 5×10^{-8} M + P_4 (n=8)	0.02 ± 0.05	0.06 ± 0.17	0.09 ± 0.18	0.10 ± 0.17
YM-254890 10^{-7} M + P_4 (n=8)	-0.00 ± 0.00	0.00 ± 0.02	0.02 ± 0.09	0.03 ± 0.10
YM-254890 10^{-6} M + P_4 (n=8)	-0.00 ± 0.00	-0.01 ± 0.01	-0.01 ± 0.01	-0.01 ± 0.01

(Mean ± SD)

Table S2. Effects of YM254890 on oxytocin (Oxy)-induced rhythmic contractions in the quiescent myometrium. Oxytocin is used at the concentration of 125 μIU/ml. RRPAs of the vehicle and YM254890 groups are presented as mean ± sd in each period. n: numbers of myometrial strips.

Time (min) Group	0~5	5~10	10~15	15~20
Vehicle + Oxy (n=16)	0.44 ± 0.23	0.50 ± 0.24	0.45 ± 0.25	0.42 ± 0.25
YM-254890 5×10^{-11} M + Oxy (n=8)	0.41 ± 0.08	0.48 ± 0.06	0.44 ± 0.07	0.38 ± 0.07
YM-254890 10^{-10} M + Oxy (n=6)	0.42 ± 0.10	0.46 ± 0.14	0.41 ± 0.14	0.36 ± 0.15
YM-254890 5×10^{-10} M +Oxy (n=8)	0.27 ± 0.07	0.36 ± 0.07	0.32 ± 0.09	0.30 ± 0.09
YM-254890 10^{-9} M + Oxy (n=8)	0.33 ± 0.10	0.39 ± 0.11	0.36 ± 0.11	0.33 ± 0.11
YM-254890 5×10^{-9} M + Oxy (n=12)	0.19 ± 0.15	0.27 ± 0.22	0.23 ± 0.20	0.19 ± 0.18
YM-254890 10^{-8} M + Oxy (n=12)	0.07 ± 0.14	0.08 ± 0.16	0.06 ± 0.13	0.02 ± 0.05
YM-254890 5×10^{-8} M + Oxy (n=6)	-0.00 ± 0.00	0.00 ± 0.00	0.00 ± 0.00	0.00 ± 0.00
YM-254890 10^{-7} M + Oxy (n=6)	-0.00 ± 0.00	-0.00 ± 0.00	-0.00 ± 0.00	-0.00 ± 0.01
YM-254890 10^{-6} M + Oxy (n=6)	-0.00 ± 0.00	-0.00 ± 0.00	-0.00 ± 0.00	-0.00 ± 0.00

(Mean ± SD)

Table S3. Effects of YM254890 on Org OD 02-0 (Org)-induced rhythmic contractions in the quiescent myometrium. Org OD 02-0 is used at the concentration of 5×10^{-6} M. RRPAs of the vehicle and YM254890 groups are presented as mean ± sd in each period. n: numbers of myometrial strips.

Time (min) Group	0~5	5~10	10~15	15~20
Vehicle + Org (n=15)	0.37 ± 0.18	0.58 ± 0.15	0.59 ± 0.11	0.55 ± 0.10
YM-254890 5×10^{-11} M + Org (n=10)	0.28 ± 0.14	0.58 ± 0.13	0.60 ± 0.13	0.57 ± 0.11
YM-254890 10^{-10} M + Org (n=10)	0.35 ± 0.20	0.54 ± 0.18	0.55 ± 0.15	0.49 ± 0.13
YM-254890 5×10^{-10} M + Org (n=10)	0.27 ± 0.19	0.56 ± 0.13	0.58 ± 0.11	0.53 ± 0.09
YM-254890 10^{-9} M + Org (n=10)	0.31 ± 0.26	0.53 ± 0.21	0.54 ± 0.16	0.47 ± 0.16
YM-254890 5×10^{-9} M + Org (n=14)	0.19 ± 0.17	0.36 ± 0.22	0.36 ± 0.21	0.35 ± 0.22
YM-254890 10^{-8} M + Org (n=14)	0.01 ± 0.03	0.08 ± 0.14	0.10 ± 0.16	0.12 ± 0.16
YM-254890 5×10^{-8} M + Org (n=6)	-0.00 ± 0.00	-0.00 ± 0.00	-0.00 ± 0.00	-0.00 ± 0.00
YM-254890 10^{-7} M + Org (n=6)	-0.00 ± 0.00	-0.00 ± 0.00	-0.00 ± 0.00	-0.00 ± 0.00
YM-254890 10^{-6} M + Org (n=6)	-0.00 ± 0.00	-0.00 ± 0.00	-0.01 ± 0.00	-0.01 ± 0.00

(Mean ± SD)

Table S4. Effects of YM254890 on progesterone (P_4)-induced relaxant effect in the high-KCl induced tonic contraction. Progesterone is used at the concentration of 5×10^{-6} M. Relative ratio of the peak areas (RRPAs) of the vehicle and YM254890 groups are presented as mean ± sd in each period. n: numbers of myometrial strips.

Time (min) Group	-5-0	0-5	5-10	10-15	15-20
Vehicle + P_4 (n=6)	1.22±0.11	1.00±0.12	0.74±0.11	0.62±0.10	0.55±0.08
YM-254890 10^{-10}M + P_4 (n=6)	1.18±0.16	0.98±0.20	0.74±0.21	0.62±0.20	0.55±0.18
YM-254890 10^{-9}M + P_4 (n=6)	1.11±0.14	0.94±0.15	0.71±0.17	0.58±0.18	0.51±0.18
YM-254890 10^{-8}M + P_4 (n=6)	1.13±0.24	0.96±0.27	0.76±0.29	0.65±0.29	0.60±0.28
YM-254890 10^{-7}M + P_4 (n=6)	1.01±0.23	0.85±0.24	0.66±0.23	0.57±0.21	0.51±0.19
YM-254890 10^{-6}M + P_4 (n=6)	0.92±0.25	0.75±0.27	0.56±0.26	0.47±0.23	0.42±0.21

(Mean ± SD)

Table S5. Effects of YM254890 on Org OD 02-0 (Org)-induced relaxant effect in the high-KCl induced tonic contraction. Org OD 02-0 is used at the concentration of 5×10^{-6} M. RRPAs of the vehicle and YM254890 groups are presented as mean ± sd in each period. n: numbers of myometrial strips.

Time (min) Group	-5-0	0-5	5-10	10-15	15-20
Vehicle + Org (n=6)	1.19±0.14	1.05±0.16	0.84±0.20	0.72±0.22	0.64±0.22
YM-254890 10^{-10}M + Org (n=6)	1.28±0.14	1.15±0.13	0.94±0.14	0.80±0.13	0.70±0.13
YM-254890 10^{-9}M + Org (n=6)	1.31±0.15	1.18±0.15	0.97±0.16	0.83±0.17	0.74±0.17
YM-254890 10^{-8}M + Org (n=6)	1.22±0.20	1.06±0.19	0.83±0.20	0.70±0.20	0.61±0.20
YM-254890 10^{-7}M + Org (n=6)	1.20±0.21	1.02±0.23	0.76±0.25	0.61±0.24	0.51±0.22
YM-254890 10^{-6}M + Org (n=6)	1.12±0.24	0.96±0.23	0.73±0.20	0.60±0.17	0.50±0.15

(Mean ± SD)