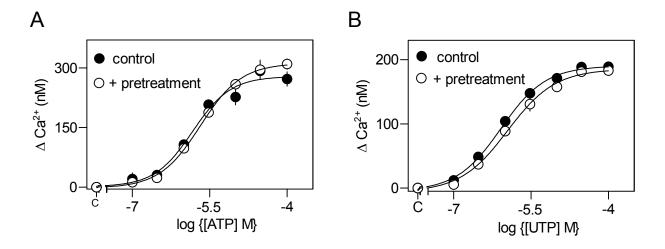
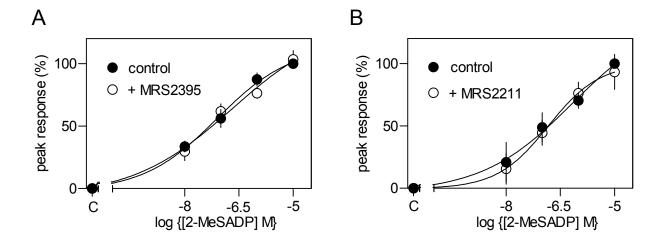
## **Supporting Information**

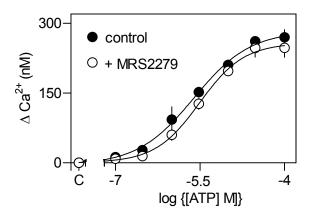
Figure S1 Structures of the ligands used.



**Figure S2** Effects of an ATP/UTP-regenerating system on responses to ATP and UTP. Concentration-dependent effects of ATP (A) and UTP (B) on  $[Ca^{2+}]_i$  in ASMC in HBS alone or after pretreatment of cells and ligands with an ATP/UTP-regenerating system (as described in the text).



**Figure S3** Effects of MRS2395 and MRS2211 on the  $Ca^{2+}$  signals evoked by 2-MeSADP. Concentration-dependent effects of 2-MeSADP on  $[Ca^{2+}]_i$  alone or in the presence of MRS2395 (30  $\mu$ M, A) or MRS2211 (10  $\mu$ M, B). Results are expressed as percentages of the maximal response to 2-MeSADP alone.



**Figure S4** Effects of MRS2279 on the  $Ca^{2+}$  signals evoked by ATP. Concentration-dependent effects of ATP on  $[Ca^{2+}]_i$  alone or with MRS2279 (3  $\mu$ M).

Table S1 Primers used for quantitative PCR

Gene	Qiagen code	Catalogue number
P2Y1	Pn P2ry1 2SG	OT01084587
P2Y2	Rn P2ry2 2 SG	QT01081164
	_ , _	
P2Y4	Rn_P2ry4_1SG	QT00390873
P2Y6	Rn_P2ry6_1_SG	QT01083425
P2Y12	Rn_P2ry12_1_SG	QT00413287
P2Y13	Rn_RGD:1302941_1_SG	QT00407841
P2Y14	Rn_P2ry14_1_SG	QT00418327
β-actin	Forward: GTCACCAACTGGGACGATA	
	Reverse: GTCACCAACTGGGACGATA	