BK Channels Regulate LPS-induced CCL-2 Release from Human Pulmonary Endothelial Cells

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ONLINE DATA SUPPLEMENT

Online Data Supplement

Supplementary Figure E1. (A) mRNA expression (Ct) of the pore-forming α-1-subunit *KCNMA1* and the auxiliary *KCNMB1*, -2, *-3, -4* β-subunits in human pulmonary microvascular endothelial (HULEC5a, n = 6) and human alveolar epithelial cells (HPAEpiC, A549, and H441; n = 4-7).

Supplementary Figure E2. Validation of the Em FLIPR assay. Representative recordings (A, C) and summary plots (B, D; n = 3-6, *p ≤ 0.05) showing the voltage-dependence of the FLIPR assay as dose-response curves to incremental increases in extracellular K^+ (K_2SO_4) concentrations (reflective of incremental Em depolarization) in human endothelial Hulec5a (A, B) and epithelial HPAEpiC cells (C, D). ∆IF represents the IF values of each K^+ curve after subtracting the values for the 0 mM K^+ control. Black arrows indicate the timing of changes in extracellular K^+ (K_2SO_4) concentrations.

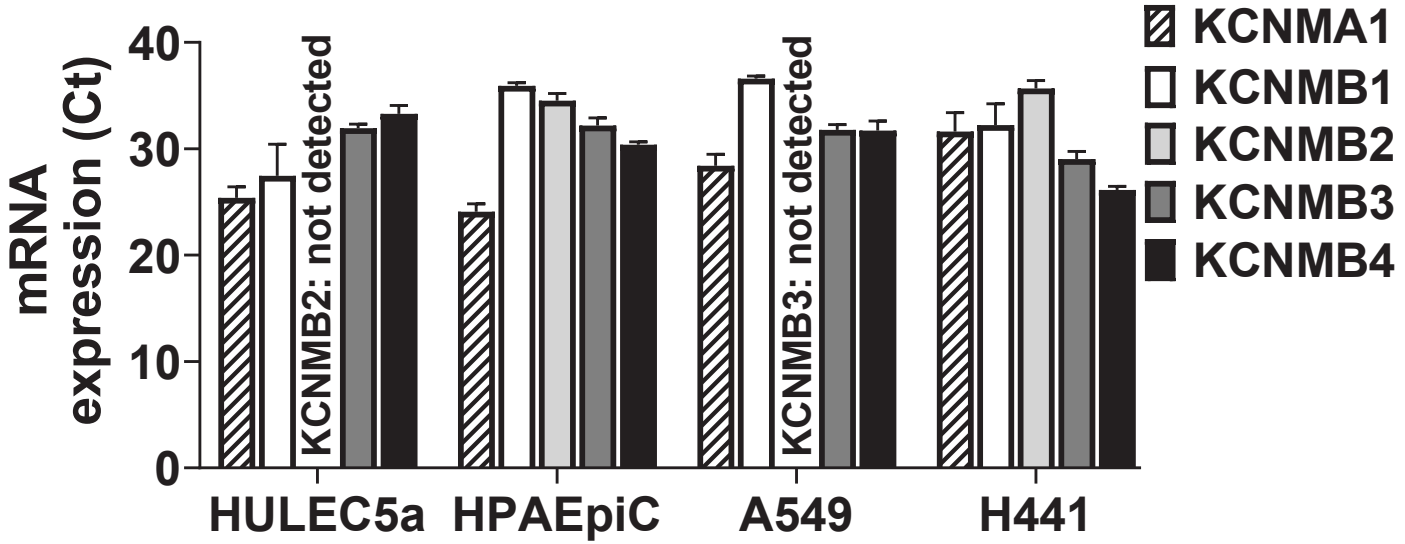
Supplementary Table E1. Complete list of genes altered by NS1619 in LPS-treated human pulmonary microvascular endothelial cells. FC - fold change in gene expression.

Gene symbol	Gene description	FC by NS1619
TNFSF-13B	Tumor necrosis factor ligand superfamily member 13B/B-cell activating factor (BAFF)	-3.1
CASP-1	Caspase-1	-2.3
ADRB2	β2-adrenergic receptor	-2.0
IL1RAPL2	Interleukin-1 receptor accessory protein-like 2	-1.6
ALOX-5	Arachidonate 5-lipoxygenase	-1.5
PTGIS	Prostaglandin-endoperoxide synthase, cyclooxygenase or COX	-1.3
PDE4B	Phosphodiesterase 4B	-1.3
PTGER3	Prostaglandin E Receptor 3	-1.3
PTGS-2	Prostaglandin-endoperoxide synthase -2, cyclooxygenase-2 or COX-2	4.3
PLA2G2A	Phospholipase A2 Group IIA	3.0
IL-13	Interleukin-13	2.6
IL1R1	Interleukin-1 receptor, type I/Cluster of Differentiation 121a (CD121a)	2.4
KLKB-1	Kallikrein (KK) B-1	2.1
PTGFR	Prostaglandin F Receptor	1.9

PLCE-1	1-Phosphatidylinositol-4,5-bisphosphate phosphodiesterase epsilon-1	1.9
BDKRB-1	Prostaglandin-endoperoxide synthase 2, cyclooxygenase-2 or COX-2	1.8
HRH-3	Phospholipase A2 Group IIA	1.7
LTB4R	Leukotriene B4 Receptor	1.7
PLA2G-10	phospholipase A2 group X	1.7
PLCD-1	1-phosphatidylinositol 4,5-bisphosphate phosphodiesterase delta-1	1.6
ICAM1	Intercellular Adhesion Molecule 1	1.6
PLA2G4C	Phospholipase A2 group IVC	1.5
PLCB-4	Phospholipase C beta-4	1.4
PTGS-1	Prostaglandin-endoperoxide synthase 1, cyclooxygenase-1 or COX-1	1.3
TNF	Tumor necrosis factor	1.3
IL2RB	Interleukin-2 receptor subunit beta	1.3
CD40	Cluster of differentiation 40	1.2
MAPK-8	Mitogen-activated protein kinase-8	1.2
HRH1	Histamine Receptor H1	1.1

Supplementary Figure E1

A



Supplementary Figure E2