

Figure S1. Specificity of AK094629 probe binding to AK094629 was verified using the fluorescence *in situ* hybridisation assay. (A) Cells in the confocal dish were treated with a hybridisation solution without the AK094629 probe. (B) Cells in the confocal dish were treated with a hybridisation solution containing 20 nmol/l AK094629 probe. Scale bar, 50 μ m.

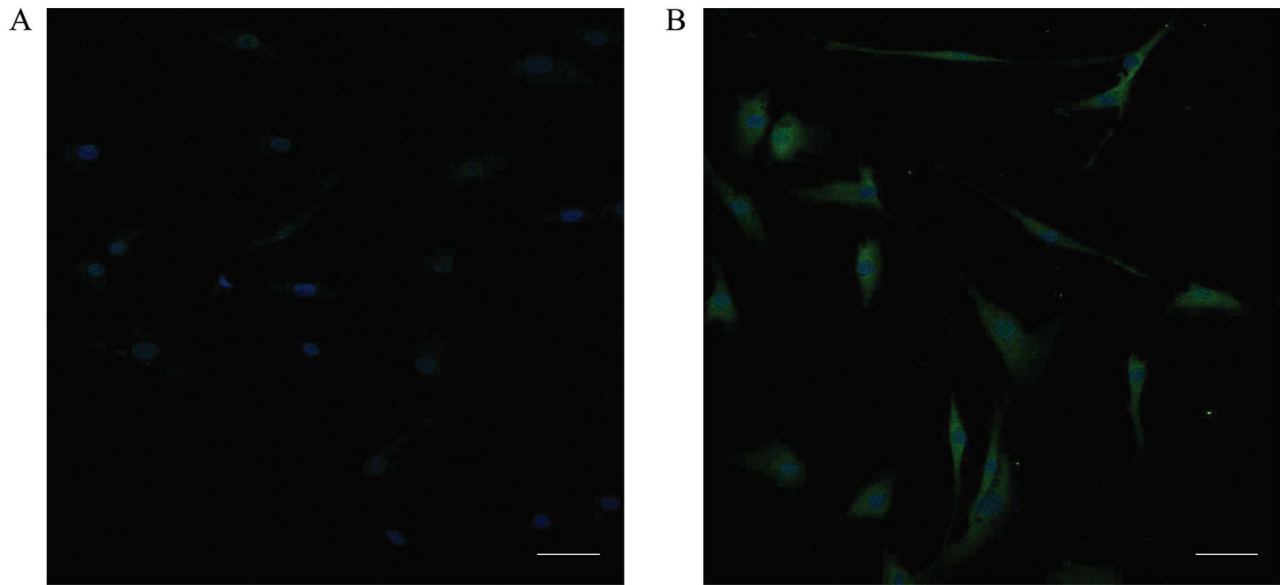


Table SI. Details and statistical data of Fig. 1C.

Gene	Control	IL-1β 5 ng/ml	IL-1β 10 ng/ml	IL-1β 20 ng/ml
AK094629				
Mean	0.96	1.52	1.61	1.86
SD	0.37	0.18	0.16	0.14
P (vs. control)	-	0.001	<0.001	<0.001
IL, interleukin.				

Table SII. Details and statistical data of Fig. 2A.

Gene	Control	NC	si-AK094629
AK094629			
Mean	1.01	0.87	0.34
SD	0.03	0.04	0.02
P (vs. control)	-	0.019	<0.001
P (vs. NC)	0.019	-	<0.001
NC, negative control; si, small interfering.			

Table SIII. Details and statistical data of Fig. 2B.

Gene	NC	NC+IL-1 β	si-AK094629+IL-1 β
IL-6			
Mean	1.11	239.66	153.43
SD	0.10	13.27	8.50
P (vs. NC)	-	<0.001	<0.001
P (vs. NC+IL-1 β)	<0.001	-	<0.001
NC, negative control; si, small interfering; IL, interleukin.			

Table SIV. Details and statistical data of Fig. 2C.

Protein	NC	NC+IL-1β	si-AK094629+IL-1β
IL6			
Mean	531.23	22,303.00	13,531.93
SD	20.02	3,471.35	3,503.46
N	993	979	991
P (vs. NC)	-	<0.001	<0.001
P (vs. NC+IL-1β)	<0.001	-	<0.001

NC, negative control; IL, interleukin; si, small interfering.

Table SV. Details and statistical data of Figs. 2E and 5C.

Protein	NC	NC+IL-1 β	si-AK094629+IL-1 β
IL-6			
Mean	1.00	1.71	0.99
SD	0.04	0.03	0.04
P (vs. NC)	-	<0.001	0.653
P (vs. NC+IL-1 β)	<0.001	-	0.001
MAP3K4			
Mean	0.98	1.67	0.55
SD	0.05	0.07	0.09
P (vs. NC)	-	<0.001	<0.001
P (vs. NC+IL-1 β)	<0.001	-	<0.001

Table SVI. Details and statistical data of Fig. 3C.

Fluorescence intensity	Control	IL-1 β
AK094629		
Mean	1.00	1.59
SD	0.07	0.10
P (vs. control)	-	0.001

Table SVII. Details and statistical data of Fig. 4A.

Gene	NC	siMAP3KA-1	siMAP3KA-2	siMAP3KA-3
MAP3K4				
Mean	0.94	0.65	0.23	0.31
SD	0.05	0.01	0.01	0.04
P (vs. NC)	-	<0.001	<0.001	<0.001

NC, negative control; MAP3K4, mitogen-activated protein kinase kinase kinase 4; si, small interfering.

Table SVIII. Details and statistical data of Fig. 4C.

Protein	NC	siMAP3K4-1	siMAP3K4-2	siMAP3K4-3
MAP3K4				
Mean	1.01	0.79	0.68	0.57
SD	0.03	0.01	0.12	0.02
P (vs. NC)	-	<0.001	<0.001	<0.001

NC, negative control; MAP3K4, mitogen-activated protein kinase kinase kinase 4; si, small interfering.

Table SIX. Details and statistical data of Fig. 4D.

Gene	NC	NC+IL-1 β	siMAP3KA-2+IL-1 β	siMAP3KA-3+IL-1 β
IL-6				
Mean	0.99	276.64	10.56	10.15
SD	0.03	17.25	0.15	0.11
P (vs. NC)	-	<0.001	>0.999	>0.999
P (vs. NC+IL-1 β)	<0.001	-	<0.001	>0.999

NC, negative control; IL, interleukin; MAP3K4, mitogen-activated protein kinase kinase kinase 4; si, small interfering.

Table SX. Details and statistical data of Fig. 4E.

Protein	NC	NC+IL-1 β	siMAP3KA-2+IL-1 β	siMAP3KA-3+IL-1 β
IL-6				
Mean	514.89	2,2511.43	8,411.36	12,019.67
SD	46.77	6,171.28	3,760.28	4,002.00
N	995	987	987	977
P (vs. NC)	-	<0.001	<0.001	<0.001
P (vs. NC+IL-1 β)	<0.001	-	<0.001	<0.001

NC, negative control; IL, interleukin; MAP3K4, mitogen-activated protein kinase kinase kinase 4; si, small interfering.

Table SXI. Details and statistical data of Fig. 4H.

Protein	NC	NC+IL-1β	siMAP3K4-2+IL-1β
IL-6			
Mean	0.98	1.30	0.54
SD	0.09	0.08	0.01
P (vs. NC)	-	0.004	<0.001
P (vs. NC+IL-1β)	0.004	-	<0.001

NC, negative control; IL, interleukin; MAP3K4, mitogen-activated protein kinase kinase kinase 4; si, small interfering.

Table SXII. Details and statistical data of Fig. 4I.

Protein	NC	NC+IL-1β	siMAP3K4-3+IL-1β
IL-6			
Mean	1.00	1.77	1.14
SD	0.03	0.19	0.06
P (vs. NC)	-	0.001	0.080
P (vs. NC+IL-1β)	0.001	-	0.002

NC, negative control; IL, interleukin; MAP3K4, mitogen-activated protein kinase kinase kinase 4; si, small interfering.

Table SXIII. Details and statistical data of Fig. 5A.

Gene	NC	NC+IL-1 β	si-AK094629+IL-1 β
MAP3K4			
Mean	1.03	1.24	0.56
SD	0.03	0.04	0.06
P (vs. NC)	-	0.001	<0.001
P (vs. NC+IL-1 β)	0.001	-	<0.001

NC, negative control; IL, interleukin; MAP3K4, mitogen-activated protein kinase kinase kinase 4; si, small interfering.

Table SXIV. Details and statistical data of Fig. 5D.

Gene	NC	siMAP3KA-2	siMAP3KA-3
AK094629			
Mean	0.98	0.93	1.02
SD	0.03	0.05	0.03
P (vs. NC)	-	0.334	0.636

NC, negative control; IL, interleukin; MAP3K4, mitogen-activated protein kinase kinase kinase 4; si, small interfering.

Table SXV. Details and statistical data of Fig. 6B.

Protein	NC	NC+IL-1 β	siMAP3K4-2+IL-1 β	siMAP3K4-3+IL-1 β
p38				
Mean	1.03	1.25	0.91	0.74
SD	0.02	0.07	0.05	0.06
P (vs. NC)	-	0.001	0.032	<0.001
P (vs. NC+IL-1 β)	0.001	-	<0.001	<0.001
p-p38				
Mean	1.04	1.40	0.94	0.86
SD	0.04	0.04	0.06	0.10
P (vs. NC)	-	<0.001	0.081	0.009
P (vs. NC+IL-1 β)	<0.001	-	<0.001	<0.001

NC, negative control; IL, interleukin; MAP3K4, mitogen-activated protein kinase kinase kinase 4; si, small interfering.

Table SXVI. Details and statistical data of Fig. 6D.

Protein	NC	NC+IL-1 β	si-AK094629+IL-1 β
p38			
Mean	1.00	1.15	0.88
SD	0.02	0.03	0.01
P (vs. NC)	-	<0.001	0.001
P (vs. NC+IL-1 β)	<0.001	-	<0.001
p-p38			
Mean	1.01	1.54	0.91
SD	0.09	0.11	0.05
P (vs. NC)	-	<0.001	0.206
P (vs. NC+IL-1 β)	<0.001	-	
NC, negative control; IL, interleukin; si, small interfering.			