

## PKCε on bone marrow mesenchymal stem cells

**Supplementary Table 1.** Primer sequences

Name	Sequence	Primer length	Tm	Product length
PI3K-F	ATACCGTCAGCAGTTTGTCTC	21	55.4	212
PI3K-R	GCATCCAAGGGTCCAGTTAGT	21	58.2	
PKCε-F	AAGGTGTTAGGCAAAGGCAG	20	57.3	192
PKCε-R	GCAGCAATAGAGTTGGGTTAG	21	54.8	
AKT-F	TTTGGGAAGGTGATCCTGGTG	21	62	184
AKT-R	GGTCGTGGGTCTGGAATGAGT	21	60.9	
CXCR4-F	TCTTCTTACTGGCATAGTGG	21	55.3	224
CXCR4-R	GCTGTAAAGGTTGACGGTGTA	21	55.6	
SDF-1F	CTGAATAGTGGCTCCCAAGGTT	22	60.1	151
SDF-1R	GTGGATCTCGCTCTCCCTGAC	22	62.5	
P38/MAPK-F	GGTTTTGGACTCGGATAAGA	20	54.3	246
P38/MAPK-R	GTGGGATGGACAGAACAGAAG	21	56.6	
JNK-F	TTTGGGAAGGTGATCCTGGTG	20	52.6	217
JNK-R	TTTGGACGCATCTATCACC	19	53.7	
β-actin-F	GGAGATTACTGCCCTGGCTCCTAGC	25	60.1	155
β-actin-R	GGCCGGACTCATCGTACTCCTGCTT	25	62	

**Supplementary Table 2.** Conditions of the primary antibody incubation

Primary antibody	resource	dilution ratio	Incubation condition
CD29 antibody	RabMAbs	1:20	37 °C 30 min
CD34 antibody	Santa Cruz	1:20	37 °C 30 min
CD44 antibody	Santa Cruz	1:20	37 °C 30 min
CD45 antibody	Santa Cruz	1:20	37 °C 30 min
PKCε antibody	Santa Cruz	1:100	4 °C overnight
p-JNK antibody	Santa Cruz	1:100	4 °C overnight
JNK antibody	Santa Cruz	1:100	4 °C overnight
p-P38 antibody	Santa Cruz	1:100	4 °C overnight
P38 antibody	Santa Cruz	1:100	4 °C overnight
SDF-1 antibody	Santa Cruz	1:100	4 °C overnight
CXCR4 antibody	Santa Cruz	1:100	4 °C overnight
PI3K antibody	Santa Cruz	1:100	4 °C overnight
p-AKT antibody	Santa Cruz	1:100	4 °C overnight
AKT antibody	Santa Cruz	1:100	4 °C overnight

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**Supplementary Table 3.** Conditions of the second antibody incubation

Primary antibody	Secondary antibody	dilution ratio	Incubation condition
CD29 antibody	FITC-labeled anti-rabbit secondary antibody	1:20	room temperature, away from light 30 min
CD34 antibody	FITC-labeled anti-mouse secondary antibody	1:20	room temperature, away from light 30 min
CD44 antibody	FITC-labeled anti-mouse secondary antibody	1:20	room temperature, away from light 30 min
CD45 antibody	FITC-labeled anti- mouse secondary antibody	1:20	room temperature, away from light 30 min
PKCε antibody	Goat anti-mouse IgG-HRP	1:5000	37 °C 45 min
p-JNK antibody	Goat anti-mouse IgG-HRP	1:5000	37 °C 45 min
JNK antibody	Goat anti-mouse IgG-HRP	1:5000	37 °C 45 min
p-P38 antibody	Goat anti-rabbit IgG-HRP	1:5000	37 °C 45 min
P38 antibody	Goat anti-rabbit IgG-HRP	1:5000	37 °C 45 min
SDF-1 antibody	Goat anti-rabbit IgG-HRP	1:5000	37 °C 45 min
CXCR4 antibody	Goat anti-rabbit IgG-HRP	1:5000	37 °C 45 min
PI3K antibody	Goat anti-rabbit IgG-HRP	1:5000	37 °C 45 min
p-AKT antibody	Goat anti-rabbit IgG-HRP	1:5000	37 °C 45 min
AKT antibody	Goat anti-rabbit IgG-HRP	1:5000	37 °C 45 min