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## **OPEN** Author Correction: CXCR7 ameliorates myocardial infarction as a $\beta$ -arrestin-biased receptor

Masato Ishizuka, Mutsuo Harada, Seitaro Nomura, Toshiyuki Ko, Yuichi Ikeda, Jiaxi Guo, Satoshi Bujo, Haruka Yanagisawa-Murakami, Masahiro Satoh, Shintaro Yamada, Hidetoshi Kumagai, Yoshihiro Motozawa, Hironori Hara, Takayuki Fujiwara, Tatsuyuki Sato, Norifumi Takeda, Norihiko Takeda, Kinya Otsu, Hiroyuki Morita, Haruhiro Toko & Issei Komuro

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This Article contains an error in Figure 3F, where the x-axis labels 'CM' and 'FB' were reversed.

Furthermore, the legend of Figure 3,

"ERK is activated through CXCR7 in cardiomyocytes. (a) β-Arrestin recruitment assay of CXCR7 showing that CXCL12 and TC14012 induce coupling of CXCR7 with  $\beta$ -arrestin in a dose-dependent manner (EC<sub>50</sub>: 14.8 nM and 47.4 nM, respectively). Replicate samples are derived from independent HEK293 cells (n = 3). Data are shown as the mean ± SEM. (b) Immunoblot analysis of phosphorylated ERK (pERK) and total ERK (tERK) in HEK293 cells transfected with a CXCR7 expression plasmid at various time points after stimulation with CXCL12 (100 nM). (c) Quantitative data of the results shown in (b). n = 4. Data are shown as the mean ± SEM. Significance was calculated by ANOVA followed by the Bonferroni procedure; \*\*\*P < 0.001. Note that ERK was activated upon stimulation with CXCL12, and activity peaked at 5 min. (d) Immunoblot analysis of pERK/tERK in HEK293 cells transfected with various amounts of a CXCR7 expression plasmid with CXCL12 (100 nM) or vehicle (veh). Note that ERK was activated in a CXCR7 expression plasmid-dose-dependent manner under stable CXCL12 stimulation. (e) Quantitative data of the results shown in (d). n = 3. Data are shown as the mean ± SEM. Significance was calculated by one-way analysis of variance (ANOVA) followed by the Bonferroni procedure; \*P<0.05, \*\*P<0.01, \*\*\*P<0.001. (f) Cxcr7 mRNA expression in cardiomyocytes and fibroblasts from primary culture of neonatal rat hearts. Data are shown as the mean ± SEM. Significance was calculated by an unpaired t-test. \*\*P<0.01. (g) Immunoblot analysis of pERK and tERK in primary culture of NRCMs at various time points upon stimulation with the CXCR7-specific agonist, TC14012. (h) Quantitative data of the results shown in (e). n = 3. Data are shown as the mean  $\pm$  SEM. Significance was calculated by ANOVA followed by the Bonferroni procedure; \*\**P*<0.01, \*\*\**P*<0.001."

should read:

"ERK is activated through CXCR7 in cardiomyocytes. (a)  $\beta$ -Arrestin recruitment assay of CXCR7 showing that CXCL12 and TC14012 induce coupling of CXCR7 with  $\beta$ -arrestin in a dose-dependent manner (EC<sub>50</sub>: 14.8 nM and 47.4 nM, respectively). Replicate samples are derived from independent HEK293 cells (n = 3). Data are shown as the mean ± SEM. (b) Immunoblot analysis of phosphorylated ERK (pERK) and total ERK (tERK) in HEK293 cells transfected with a CXCR7 expression plasmid at various time points after stimulation with CXCL12 (100 nM). (c) Quantitative data of the results shown in (b). n = 4. Data are shown as the mean ± SEM. Significance was calculated by ANOVA followed by the Bonferroni procedure; \*\*\*P<0.001. Note that ERK was activated upon stimulation with CXCL12, and activity peaked at 5 min. (d) Immunoblot analysis of pERK/tERK in HEK293 cells transfected with various amounts of a CXCR7 expression plasmid with CXCL12 (100 nM) or vehicle (veh). Note that ERK was activated in a CXCR7 expression plasmid-dose-dependent manner under stable CXCL12 stimulation. (e) Quantitative data of the results shown in (d). n = 3. Data are shown as the mean  $\pm$  SEM. Significance was calculated by one-way analysis of variance (ANOVA) followed by the Bonferroni procedure; \*P<0.05, \*\*P<0.01, \*\*\*P<0.001. (f) Cxcr7 mRNA expression in cardiomyocytes and fibroblasts from primary culture of neonatal rat hearts. Data are shown as the mean ± SEM. Significance was calculated by an unpaired t-test. \*\*P<0.01. (g) Immunoblot analysis of pERK and tERK in primary culture of NRCMs at various time points upon stimulation with the CXCR7-specific agonist, TC14012. (h) Quantitative data of the results shown in (g).



Figure 1. ERK is activated through CXCR7 in cardiomyocytes. (a) β-Arrestin recruitment assay of CXCR7 showing that CXCL12 and TC14012 induce coupling of CXCR7 with β-arrestin in a dose-dependent manner (EC<sub>50</sub>: 14.8 nM and 47.4 nM, respectively). Replicate samples are derived from independent HEK293 cells (n = 3). Data are shown as the mean  $\pm$  SEM. (b) Immunoblot analysis of phosphorylated ERK (pERK) and total ERK (tERK) in HEK293 cells transfected with a CXCR7 expression plasmid at various time points after stimulation with CXCL12 (100 nM). (c) Quantitative data of the results shown in (b). n = 4. Data are shown as the mean  $\pm$  SEM. Significance was calculated by ANOVA followed by the Bonferroni procedure; \*\*\*P<0.001. Note that ERK was activated upon stimulation with CXCL12, and activity peaked at 5 min. (d) Immunoblot analysis of pERK/tERK in HEK293 cells transfected with various amounts of a CXCR7 expression plasmid with CXCL12 (100 nM) or vehicle (veh). Note that ERK was activated in a CXCR7 expression plasmid-dosedependent manner under stable CXCL12 stimulation. (e) Quantitative data of the results shown in (d). n = 3. Data are shown as the mean ± SEM. Significance was calculated by one-way analysis of variance (ANOVA) followed by the Bonferroni procedure; \*P<0.05, \*\*P<0.01, \*\*\*P<0.001. (f) Cxcr7 mRNA expression in cardiomyocytes and fibroblasts from primary culture of neonatal rat hearts. Data are shown as the mean ± SEM. Significance was calculated by an unpaired *t*-test. \*\**P*<0.01. (g) Immunoblot analysis of pERK and tERK in primary culture of NRCMs at various time points upon stimulation with the CXCR7-specific agonist, TC14012. (h) Quantitative data of the results shown in (g). n = 3. Data are shown as the mean  $\pm$  SEM. Significance was calculated by ANOVA followed by the Bonferroni procedure; \*P < 0.01, \*\*P < 0.001.

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The correct Figure 3 and accompanying legend appear below as Figure 1.

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