Arsenite inhibits tissue-type plasminogen activator synthesis through NRF2 activation in cultured human vascular endothelial EA.hy926 cells

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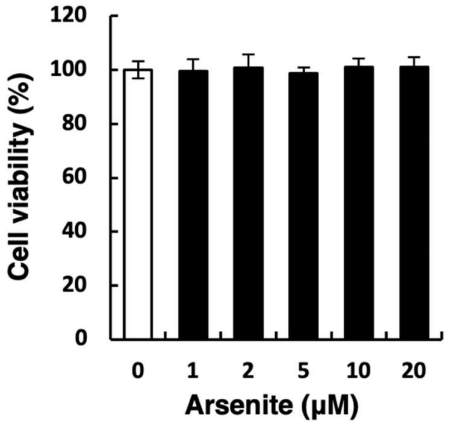

Figure S1. Cell viability of endothelial EA.hy926 cells after exposure to arsenite. Confluent cultures of endothelial EA.hy926 cells were incubated for 48 h with arsenite at 1, 2, 5, 10, or 20 μM. The data are reported as the mean ± S.D. of four samples. The data were analyzed using one-way ANOVA, followed by the Bonferroni/Dunn test.

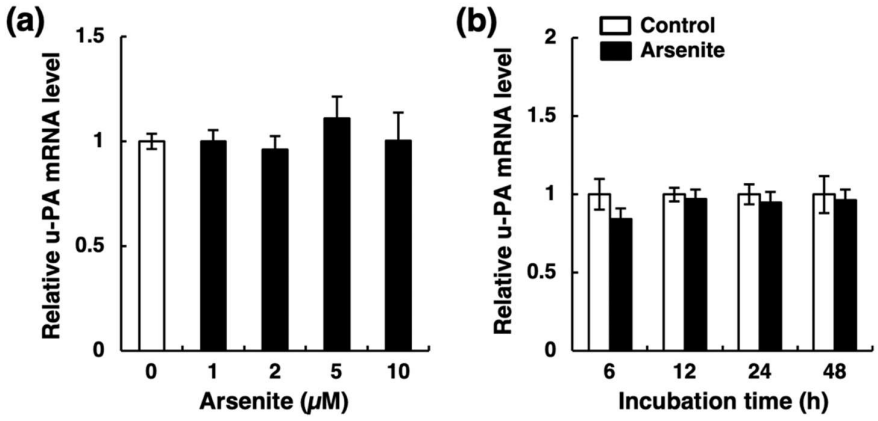

Figure S2. Effects of arsenite on the mRNA expression of u-PA in endothelial EA.hy926 cells. (a) The cells were incubated with arsenite at 1, 2, 5, or 10 μM for 24 h. The data are reported as the mean ± S.D. of three samples. The data were analyzed using one-way ANOVA, followed by the Bonferroni/Dunn test. (b) The cells were incubated with arsenite at 10 μM for 6, 12, 24, or 48 h. The data are reported as the mean ± S.D. of three samples. The data were analyzed using Student's *t*-test.

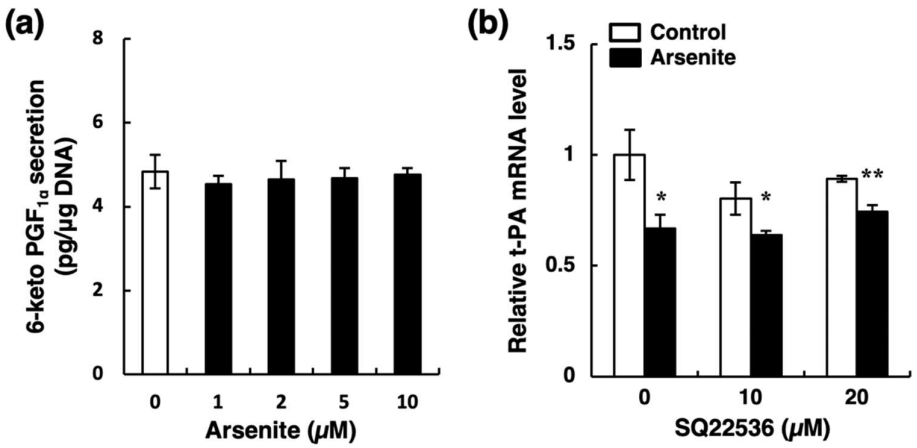

Figure S3. Possible involvement of the cyclic AMP pathway in the inhibition of t-PA mRNA expression by arsenite in endothelial EA.hy926 cells. (a) The release of PGI_2 from endothelial EA.hy926 cells into conditioned medium. The cells were incubated with arsenite at 1, 2, 5, or 10 μM for 24 h, and secreted PGI_2 was detected as 6-keto $PGF_{1\alpha}$. The data are reported as the mean ± S.D. of four samples. The data were analyzed using one-way ANOVA, followed by the Bonferroni/Dunn test. (b) Effect of SQ22536, an adenylate cyclase inhibitor, on arsenite-induced suppression of t-PA mRNA expression. The cells were incubated with arsenite at 10 μM for 24 h after pretreatment with SQ22536 for 3 h. The data are reported as the mean ± S.D. of three samples. The data were analyzed using Student's *t*-test. Significantly different from the corresponding control, $^*p < 0.05$; $^{**}p < 0.01$.