PLOS ONE

CORRECTION

Correction: Cysteine String Protein Limits Expression of the Large Conductance, Calcium-Activated K^+ (BK) Channel

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Fig 1C is incorrect as it shows the wrong actin blot. The authors have provided a corrected version of Fig 1 here.

Additionally, there is a sentence missing from the caption for Fig 3. Please see the complete, correct Fig 3 caption here. The missing sentence is highlighted in bold.

Citation: Ahrendt E, Kyle B, Braun AP, Braun JEA (2015) Correction: Cysteine String Protein Limits Expression of the Large Conductance, Calcium-Activated K^+ (BK) Channel. PLoS ONE 10(10): e0140073. doi:10.1371/journal.pone.0140073

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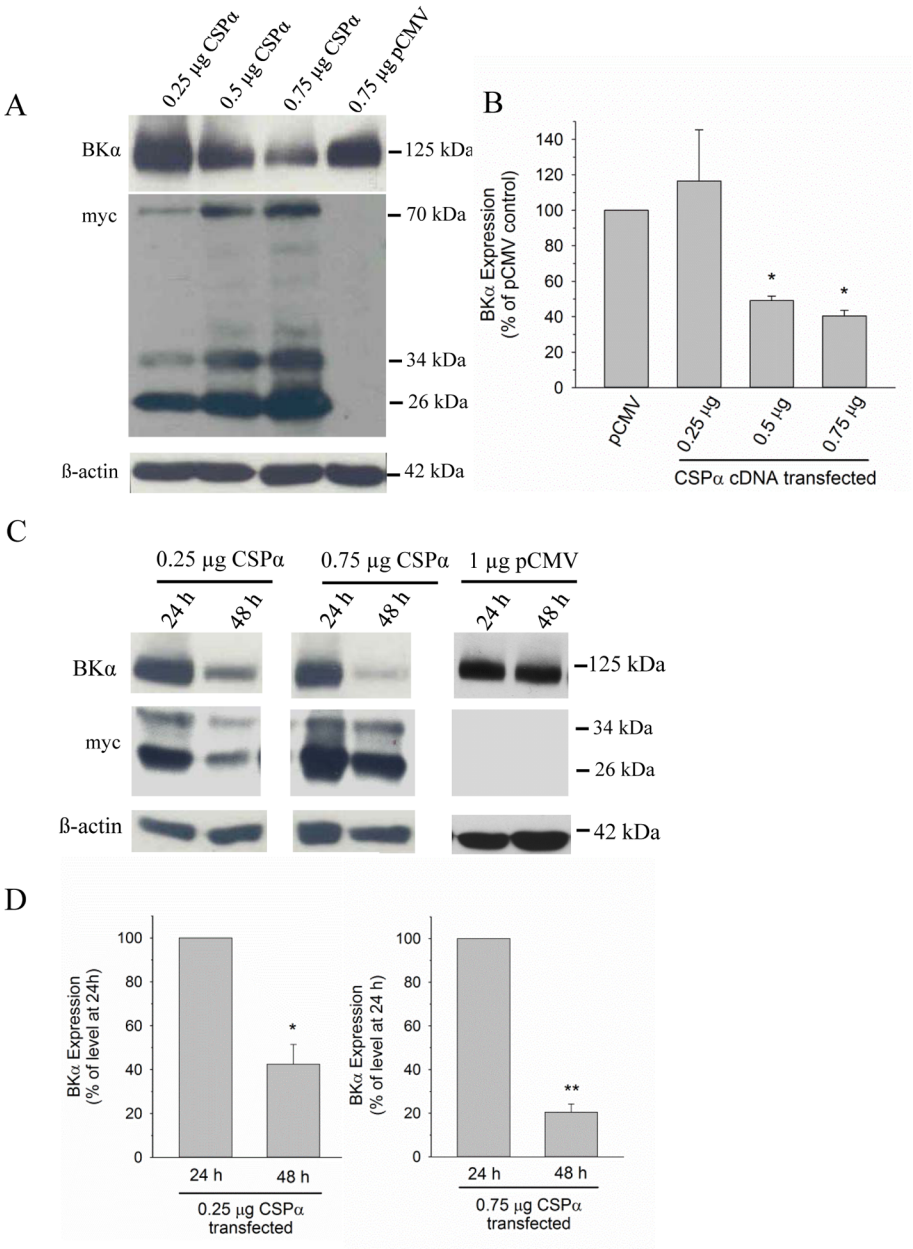

Fig 1. CSPα alters BK channel expression. A. Native CAD cells were transiently transfected with 1 µg cDNA encoding a neuronal BKα subunit, along with different amounts of myc-tagged CSPα (0.25 µg, 0.5 µg and 0.75 µg). Empty pCMV expression vector (0.75 µg) was co-transfected with 1 µg BKα subunit cDNA as a transfection control. 24 h post-transfection, the cells were lysed and the expression of BKα subunit and myc-tagged protein was analyzed by Western Blot. β-actin detection is shown to verify comparable sample loading. **B.** Histogram depicting quantification of BKα subunit levels in CAD cells co-transfected with increasing amounts of CSPα cDNA. Data are presented as mean ± SE of 5 similar experiments; *p<0.05 vs. pCMV vector control. **C.**Cells were transfected with 1 µg cDNA encoding BKα subunit along with either 0.25 µg or 0.75 µg of myc-tagged CSPα or 1 µg of pCMV. 24 h and 48 h post-transfection, BKα subunit expression was analyzed by Western Blot. **D.** Histograms depicting quantification of immunoreactive BKα subunit observed in the presence of co-transfected CSPα, as displayed in panel C. BKα subunit immunoreactivity detected at 48 h is expressed relative to the level of BKα subunit observed at 24 h; data are presented as mean ± SE of 4 similar experiments. Statistical significance was determined using one way ANOVA, *p<0.05; **p<0.01.

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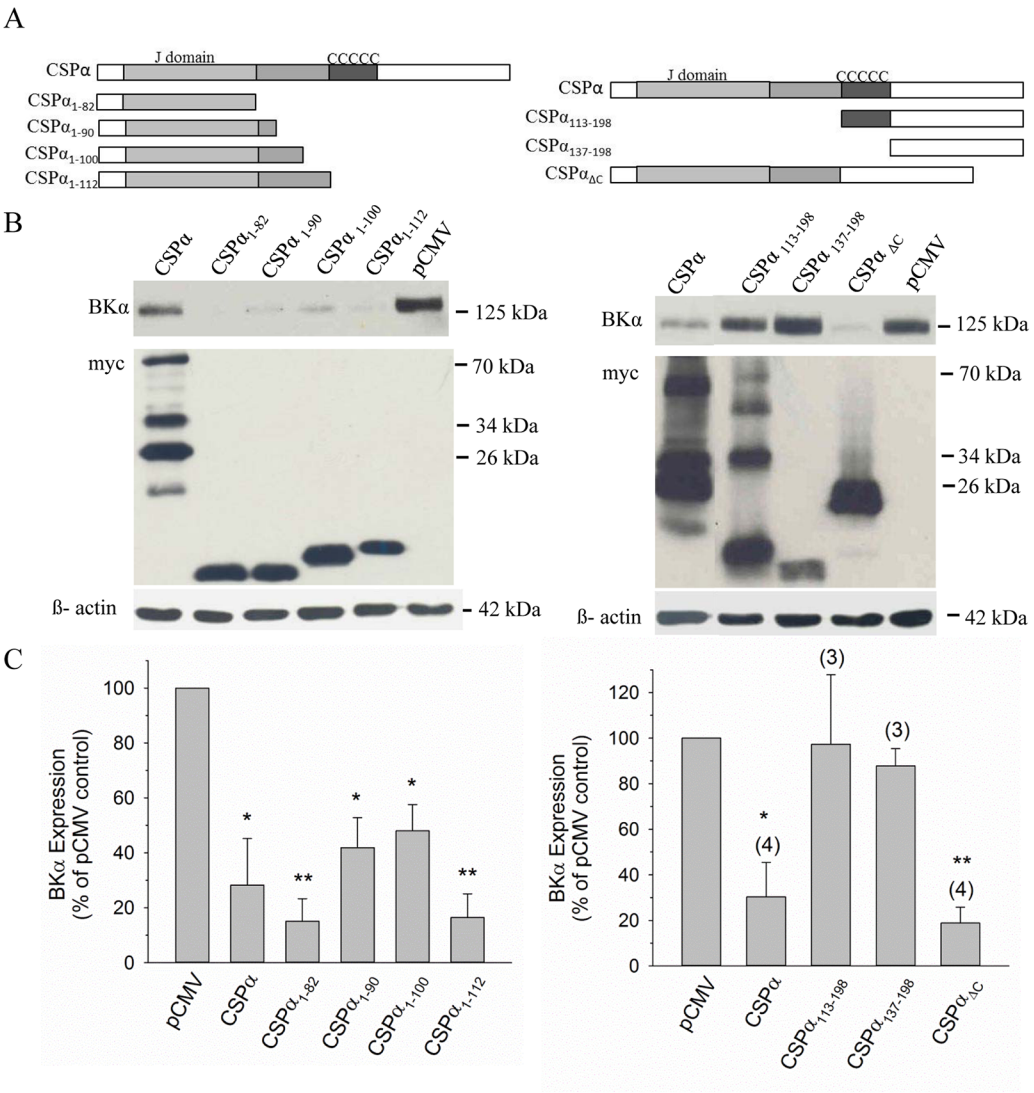

Fig 3. The J domain of CSPα reduces BK channel expression. A. Schematic of myc-tagged full length CSPα and CSPα deletion constructs. **B.** Western blot analysis of BK channel expression in CAD cells 24 h post-transfection with 1 μg cDNA encoding BKα subunit along with 0.75 μg myc-tagged full length CSPα cDNA or the indicated deletion constructs. As a transfection control, 0.75 μg empty pCMV was co-transfected with BKα subunit cDNA. 30 μg of cell lysate isolated under each experimental condition was separated by SDS-PAGE, probed with an anti-BKα subunit antibody and an anti-myc antibody. **Data shown in 3B right panel is from the same blot; a lane between lanes 1 and 2 was removed.** The histograms in panel **C** quantify changes in BK channel expression in the presence of wild-type CSPα and individual CSPα deletion mutants. Statistically significant differences from the pCMV control (set to 100%) were determined by one-way ANOVA; *p<0.05; **p<0.001.

doi:10.1371/journal.pone.0140073.g002

Supporting Information

S1 Blot. Uncropped blots for Fig 1A, Fig 1C, and Fig 3B.
(PPTX)

Reference

1. Ahrendt E, Kyle B, Braun AP, Braun JEA (2014) Cysteine String Protein Limits Expression of the Large Conductance, Calcium-Activated K^+ (BK) Channel. PLoS ONE 9(1): e86586. doi:10.1371/journal.pone.0086586 PMID: 24475152