

Supplementary Information

for

The Large Conductance, Calcium-activated K⁺ (BK) Channel is regulated by
Cysteine String Protein

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Running title: *BK channel regulation by CSP α*

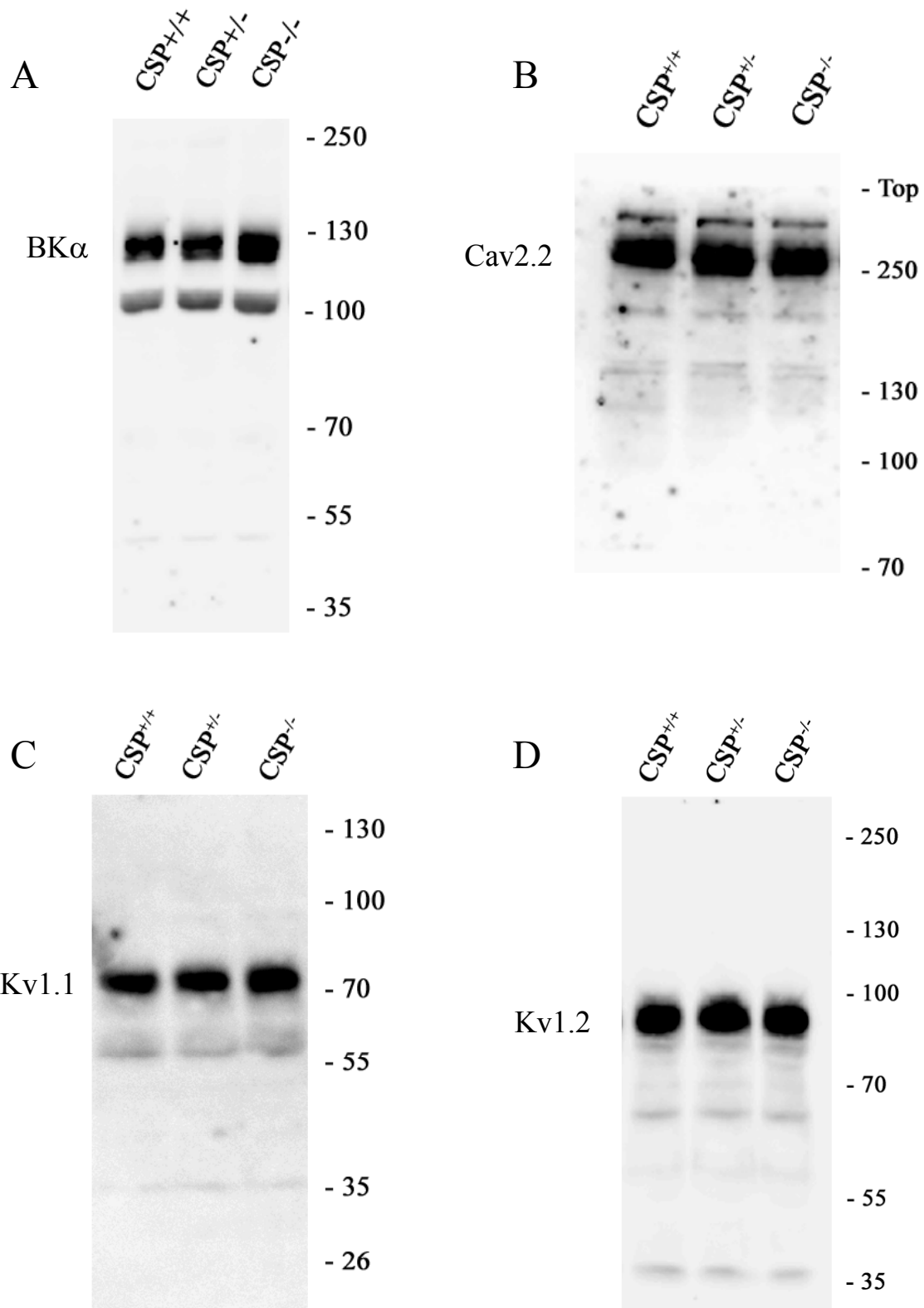
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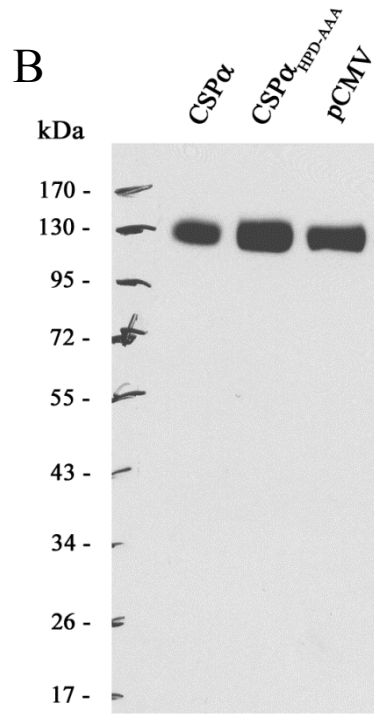
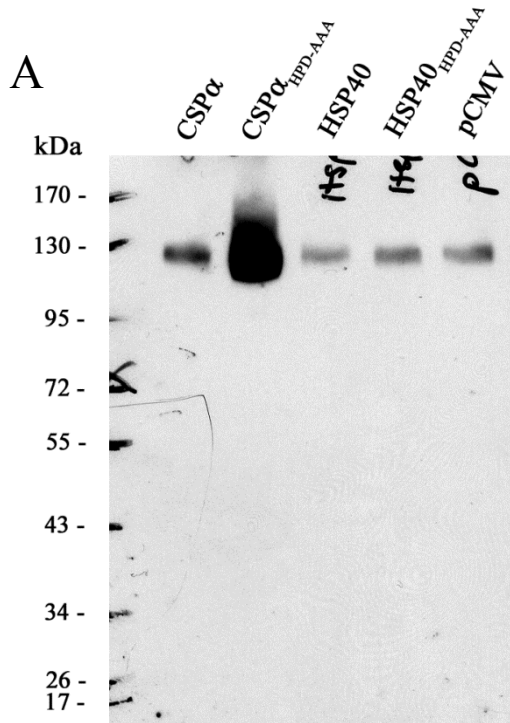
Supplementary Figures

Supplementary Figure 1 – Full length western blots displaying immunoreactive protein bands identified with antibodies recognizing the pore-forming subunits of individual ion channels endogenously expressed in the brain tissue of CSP α wild-type, heterozygous and null mice. Panels A-D show detection of BK channels, Cav2.2 channels, Kv1.1 channels and Kv1.2 channels, respectively. The data are the same as those displayed in panels A-D of Figure 1A. The electrophoretic positions of molecular markers (size in kilodaltons) are indicated on the right hand side of each blot.

Supplementary Figure 2 – Full length western blots displaying immunoreactive protein bands detected by the anti-BK α subunit antibody. Panel A displays BK channel immunoreactivity in BK stable CAD cells transiently transfected with cDNAs encoding variants of either CSP α or HSP40 as indicated above the blot. Data are the same as those displayed in the upper panel of Figure 2A. Panel B displays immunodetection of BK α subunit detected at the surface of BK stable CAD cells by biotin labeling and streptavidin pull down. Cells were transiently transfected with either wild-type or mutant CSP α , as indicated above the blot. Transfection with pCMV plasmid served as a control. Data are the same as those displayed in the upper panel of Figure 5A. The electrophoretic positions of molecular markers (size in kilodaltons) are indicated on the left hand side of each blot.



Supplementary Figure 1



Supplementary Figure 2