

**Cyclin M2 (CNNM2) knockout mice show mild hypomagnesaemia and
developmental defects**

Franken, Gijs A.C.^{1*}, Seker, Murat^{2*}, Bos, Caro¹, Siemons, Laura A.H. ¹, van der Eerden, Bram C.J.³, Christ, Annabel⁴ Hoenderop, Joost G.J.,¹ Bindels, René J.M.¹, Müller, Dominik², Breiderhoff, Tilman², de Baaij, Jeroen H.F¹.

* These authors contributed equally to this work

¹ Department of Physiology, Radboud Institute for Molecular Life Sciences, Radboud university medical center, Nijmegen, the Netherlands.

² Department of Pediatric Gastroenterology, Nephrology and Metabolic Diseases, Charité – Universitätsmedizin Berlin, Berlin, Germany

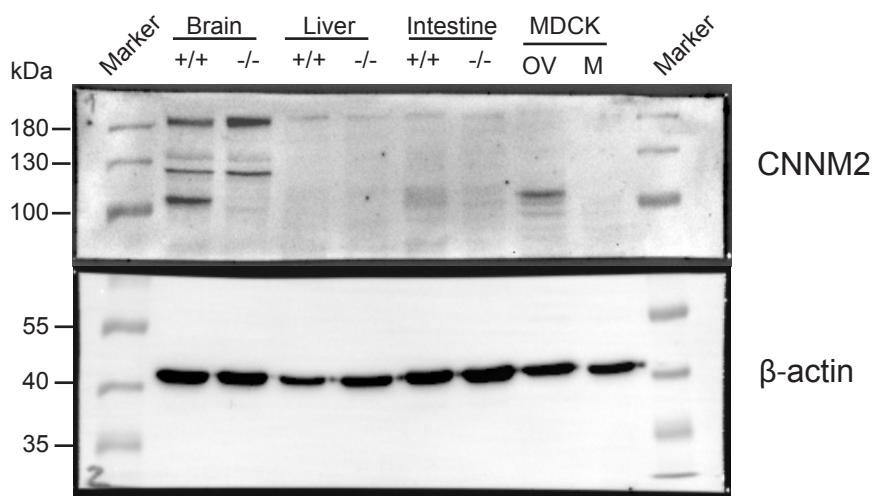
³ Department of Internal Medicine, Erasmus Medical Center, Rotterdam, the Netherlands

⁴ Department of Molecular Cardiovascular Research, Max-Delbrueck-Center for Molecular Medicine, Berlin, Germany.

Supplementary table 1: Primer sequences for real-time quantitative PCR

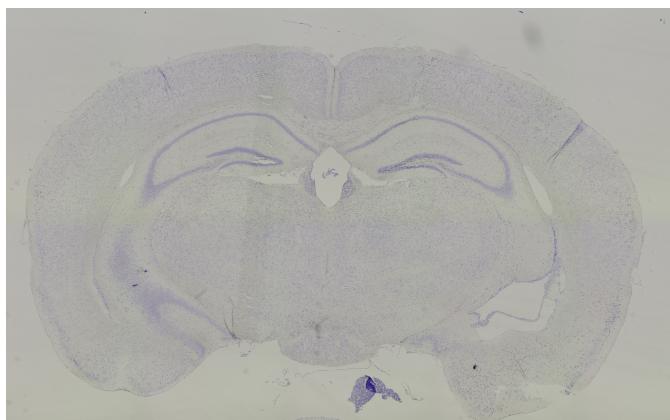
Gene	Forward primer (5'-3')	Reverse primer (5'-3')
<i>Gapdh</i>	AAGTGGAGATTGTTGCCATC	GTTGTCATGGATGACCTTGG
<i>Cnnm2</i>	GTCTCGCACCTTGTGTCA	GTCGCTCCGACTGAGAGAAT
<i>Cnnm4</i>	TCTGGGCCAGTATGTCTTG	CACAGCCATCGAAGGTTAGG
<i>Trpm6</i>	AAAGCCATGCGAGTTATCAGC	CTTCACAATGAAAACCTGCC
<i>Trpm7</i>	GGTTCCCTCCTGTGGTGCCTT	CCCCATGTCGTCTGTGCGT
<i>Slc41a1</i>	TCCCTGATGGCCACTTAGC	GATCATACCCAGGACCAAGGAG
<i>Trpv5</i>	CTGGAGCTTGTGGTTCCCTC	TCCACTTCAGGCTCACCAG
<i>Trpv6</i>	GGCCTCACAACCTCATTAC	CTCAATGAGCAGTCTAACAAATC

Supplementary Figure 1

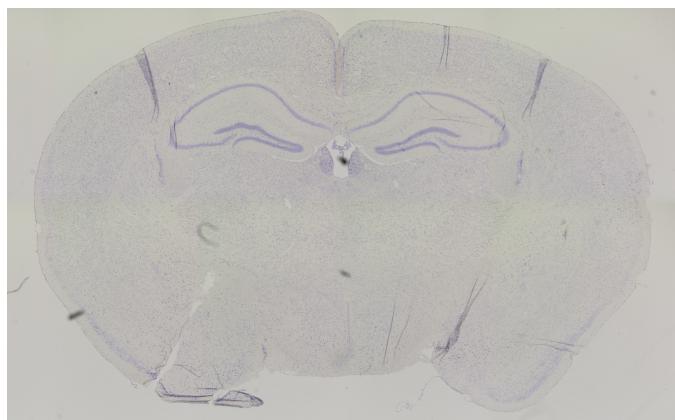


Supplementary Figure 2

Cnnm2^{+/+}



Cnnm2^{+-/-}



Supplementary Figure 1

Full Western Blot (overlay of chemiluminescence and epi-white) of brain, liver, and intestine membrane preparations from *Cnnm2^{+/+}* and *Cnnm2^{-/-}* mice (Figure 1G). MDCK cells transfected with murine *Cnnm2* (OV) or mock (M) served as a control for antibody specificity. B-actin was used as control.

Supplementary Figure 2

Nissl staining of the brain of *Cnnm2^{+/+}* and *Cnnm2^{+/-}* adult mice showing normal, comparable morphology.