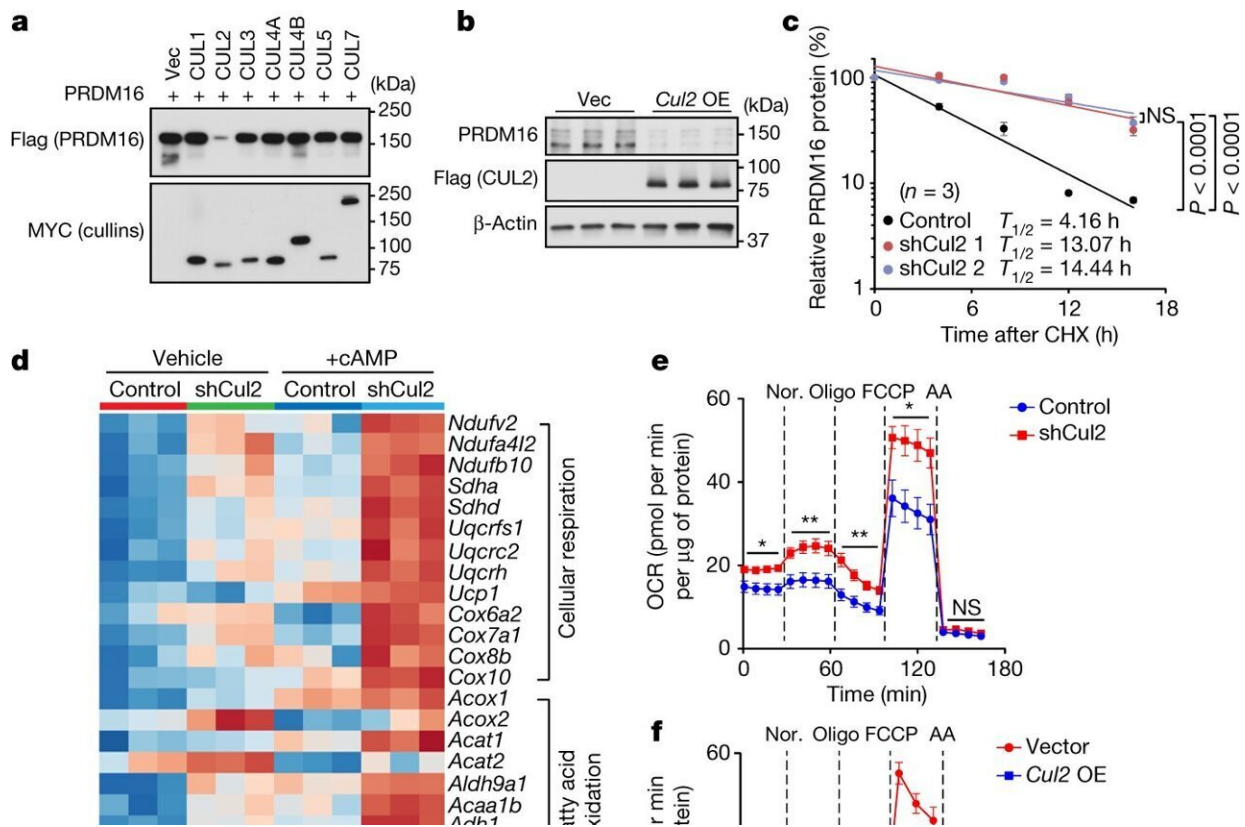


# Researchers identify a key enzyme that controls white-to-brown fat conversion

August 17 2022, by Jacqueline Mitchell



**CUL2 controls PRDM16 protein stability and beige fat biogenesis.** **a**, Immunoblotting of Flag-tagged PRDM16 protein in HEK293T cells co-expressing Myc-tagged cullin proteins or an empty vector (Vec). **b**, Immunoblotting of endogenous PRDM16 protein in inguinal adipocytes overexpressing (OE) Flag-tagged CUL2 or Vec.  $\beta$ -Actin was used as the loading control. **c**, Changes in endogenous PRDM16 stability in inguinal adipocytes expressing a scrambled control shRNA (control) or shRNAs targeting *Cul2* (1 and 2).  $n = 3$  per group. CHX, cycloheximide. **d**, Heat map of the RNA-seq

transcriptome in differentiated inguinal adipocytes expressing a scrambled control (control) or shRNA targeting *Cul2* in the presence or absence of forskolin (+cAMP).  $n = 3$  per group. All of the listed genes are significantly different (false-discovery rate (FDR))

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