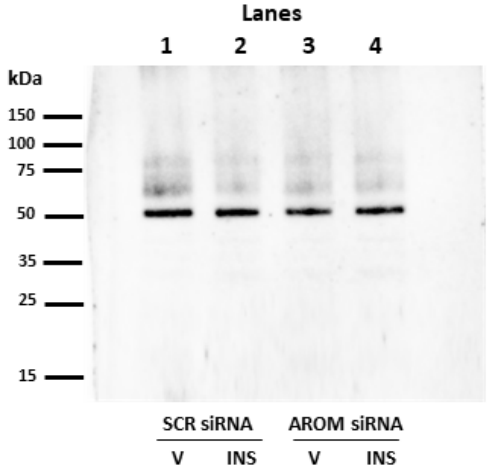
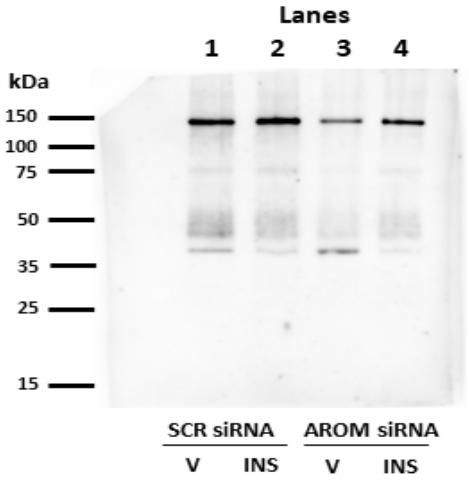
Supplementary Figure S1 Representative Rostral VMN Target Protein Full-Length Western Blots

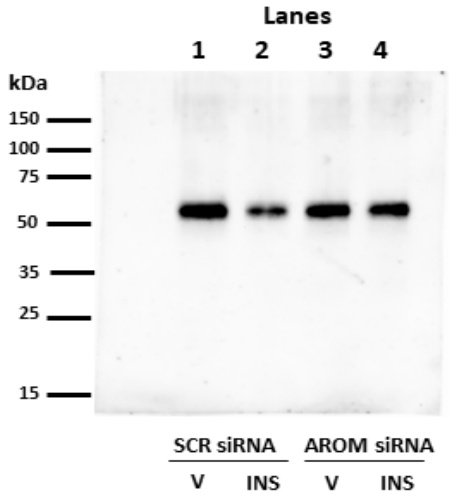
1A. Aromatase



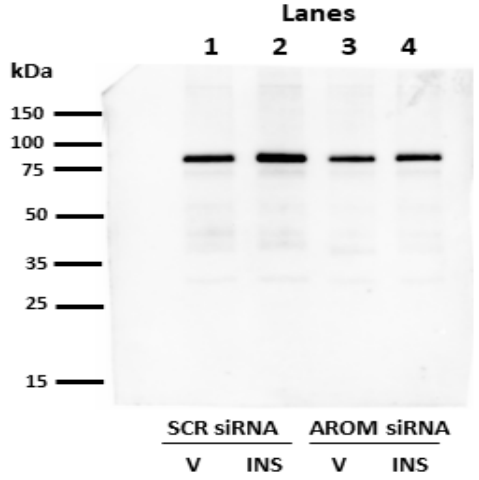
1B. Neuronal Nitric Oxide Synthase



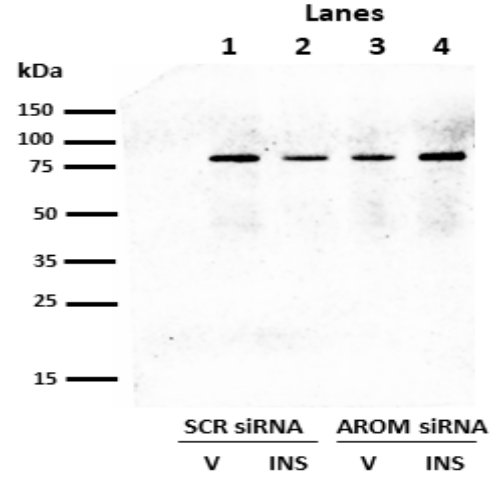
1C. Glutamate Decarboxylase$_{65/67}$



1D. Glycogen Phosphorylase-Brain Type



1E. Glycogen Phosphorylase-Muscle Type



1F. Glycogen Synthase

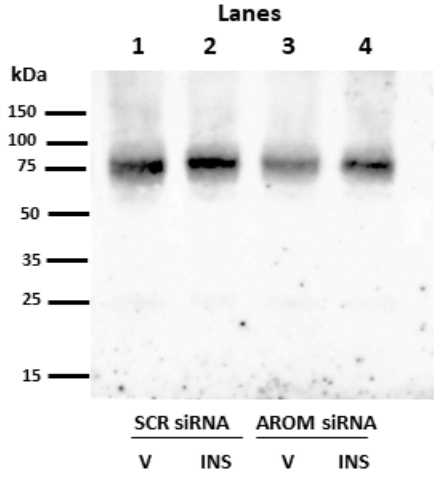
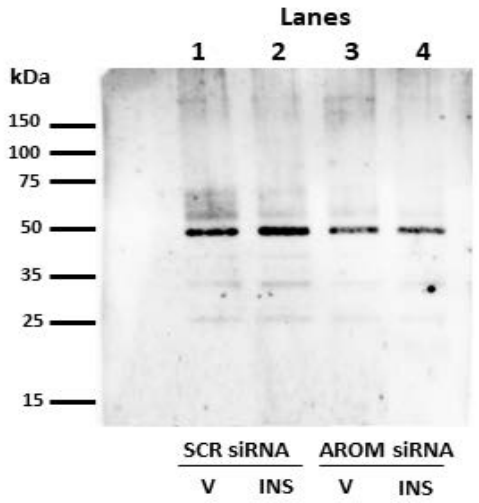


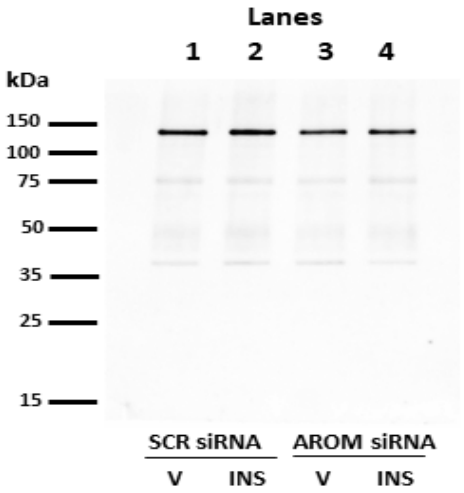
Figure S1 Legend: Figures 1A-1F depict full-length, uncropped immunoblots for rostral (-1.8 to -2.3 mm posterior to bregma) ventromedial hypothalamic nucleus (VMN) micropunch-dissected tissue sample aromatase (AROM; 1A), neuronal nitric oxide synthase (1B), glutamate decarboxylase$_{65/67}$ (1C), glycogen phosphorylase-brain type (1D), glycogen phosphorylase-muscle type (1E), or glycogen synthase (1F) protein levels in groups of male rats pretreated by intra-VMN administration of scramble (SCR) or AROM siRNA prior to subcutaneous injection of vehicle (V) or insulin (I). Molecular weight markers (15-150 kDa) are depicted to the right of each blot.

Supplementary Figure S2 Representative Middle VMN Target Protein Full-Length Western Blots

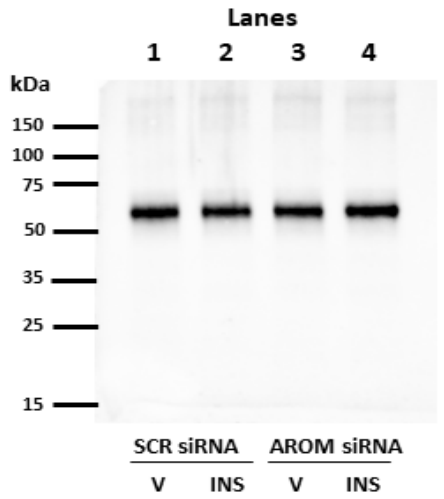
2A. Aromatase



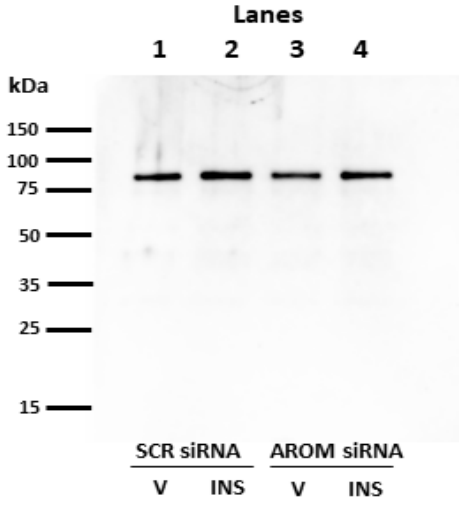
2B. Neuronal Nitric Oxide Synthase



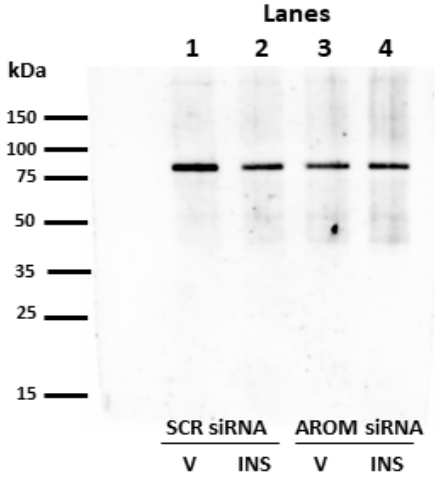
2C. Glutamate Decarboxylase$_{65/67}$



2D. Glycogen Phosphorylase-Brain Type



2E. Glycogen Phosphorylase-Muscle Type



2F. Glycogen Synthase

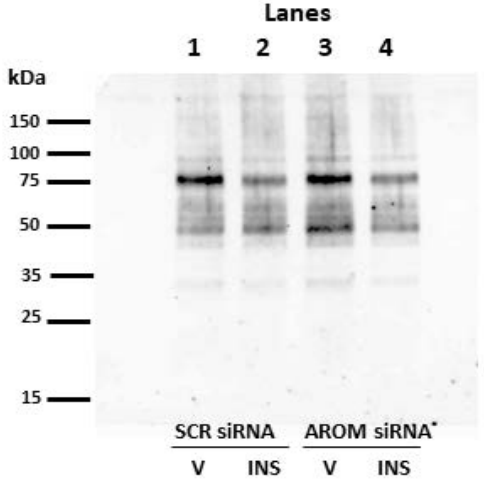
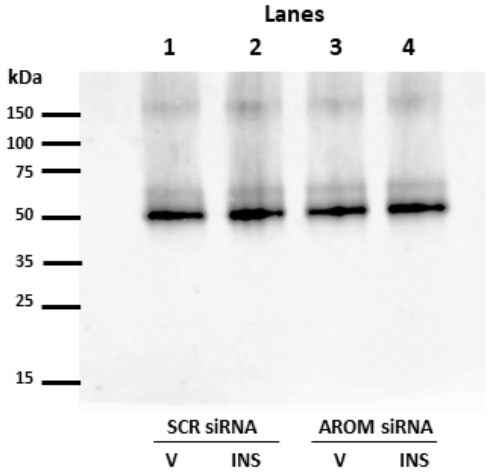


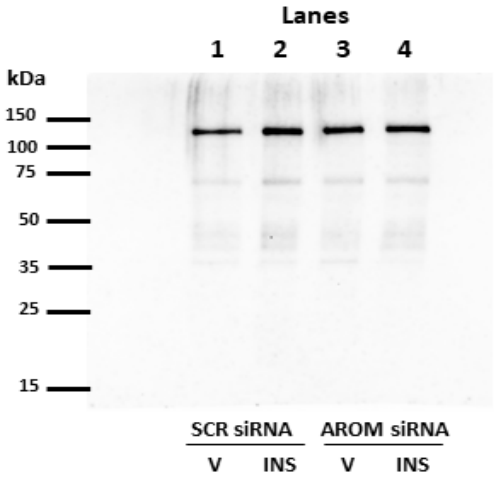
Figure S2 Legend: Figures 2A-1F depict full-length, uncropped immunoblots for middle VMN (-2.3 to -2.8 mm posterior to bregma) micropunch-dissected tissue sample AROM (2A), neuronal nitric oxide synthase (2B), glutamate decarboxylase$_{65/67}$ (2C), glycogen phosphorylase-brain type (2D), glycogen phosphorylase-muscle type (2E), or glycogen synthase (2F) protein levels in groups of male rats pretreated by intra-VMN administration of 0
SCR or AROM siRNA prior to subcutaneous injection of V or 0 I. Molecular weight markers (15-150 kDa) are depicted to the right of each blot.

Supplementary Figure S3 Representative Caudal VMN Target Protein Full-Length Western Blots

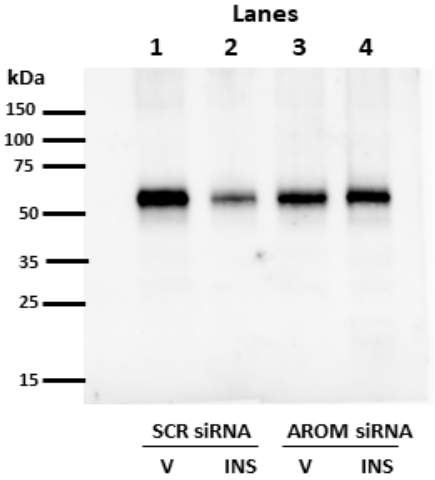
3A. Aromatase



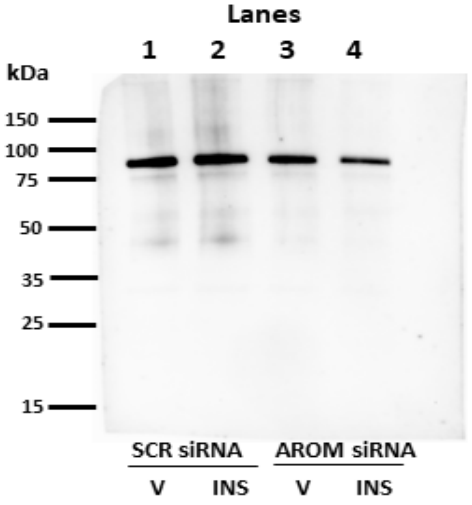
3B. Neuronal Nitric Oxide Synthase



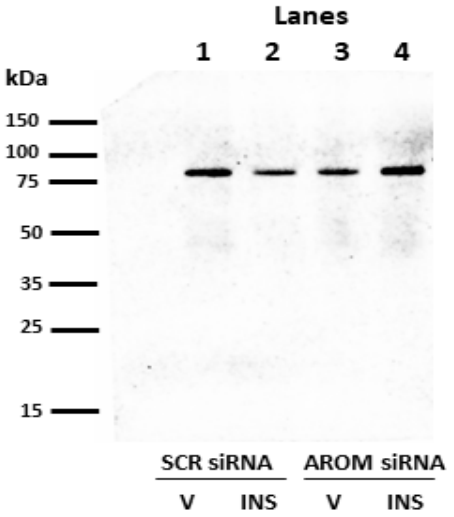
3C. Glutamate Decarboxylase$_{65/67}$



3D. Glycogen Phosphorylase-Brain Type



3E. Glycogen Phosphorylase-Muscle Type



3F. Glycogen Synthase

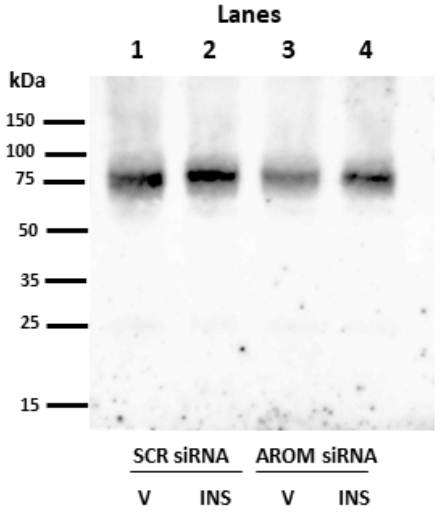
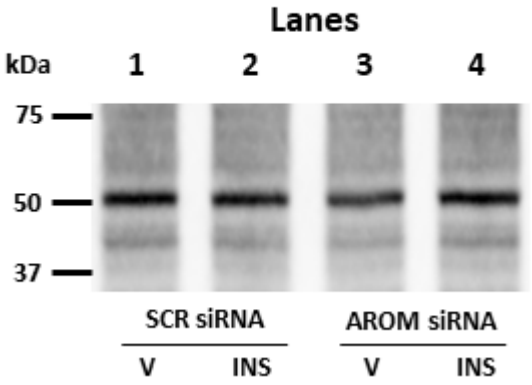


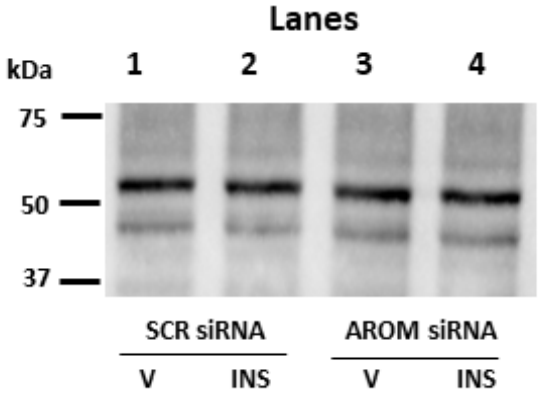
Figure S3 Legend: Figures 3A-1F depict full-length, uncropped immunoblots for caudal VMN (-2.3 to -2.8 mm posterior to bregma) micropunch-dissected tissue sample AROM (3A), neuronal nitric oxide synthase (3B), glutamate decarboxylase$_{65/67}$ (3C), glycogen phosphorylase-brain type (3D), glycogen phosphorylase-muscle type (3E), or glycogen synthase (3F) protein levels in groups of male rats pretreated by intra-VMN administration of SCR or AROM siRNA prior to subcutaneous injection of V or I. Molecular weight markers (15-150 kDa) are depicted to the right of each blot.

Supplementary Figure S4 Effects of Intra-VMN siRNA Administration on Aromatase Protein Expression in other Hypothalamic Metabolic Regulatory Structures

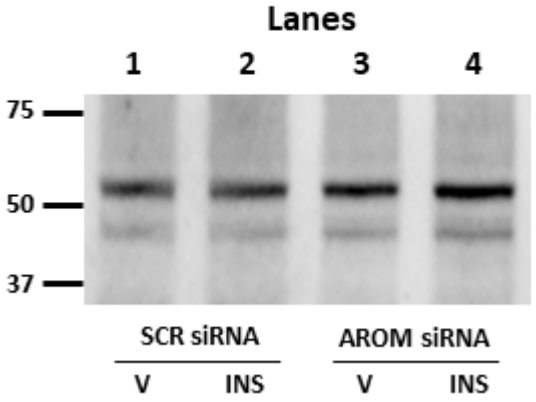
4A. PVN Aromatase



4B. DMN Aromatase



4C. LHA Aromatase



4D. ARH Aromatase

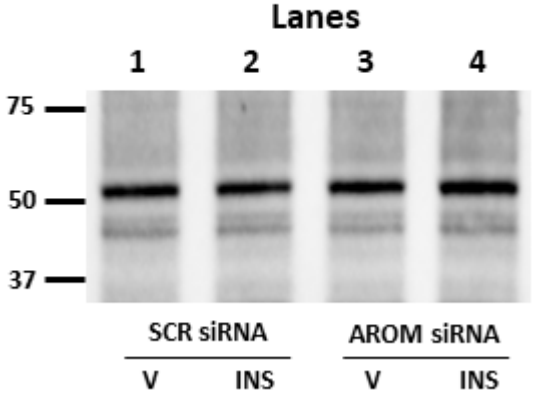


Figure S4 Legend: Figures 4A-4D show that aromatase protein expression in the PVN, DMN, LHA, and ARH, respectively, is unaffected in each location by siRNA-mediated VMN aromatase gene knockdown.