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Supplemental information

Role of hypothalamic MAPK/ERK signaling and central action of FGF1 in diabetes remission

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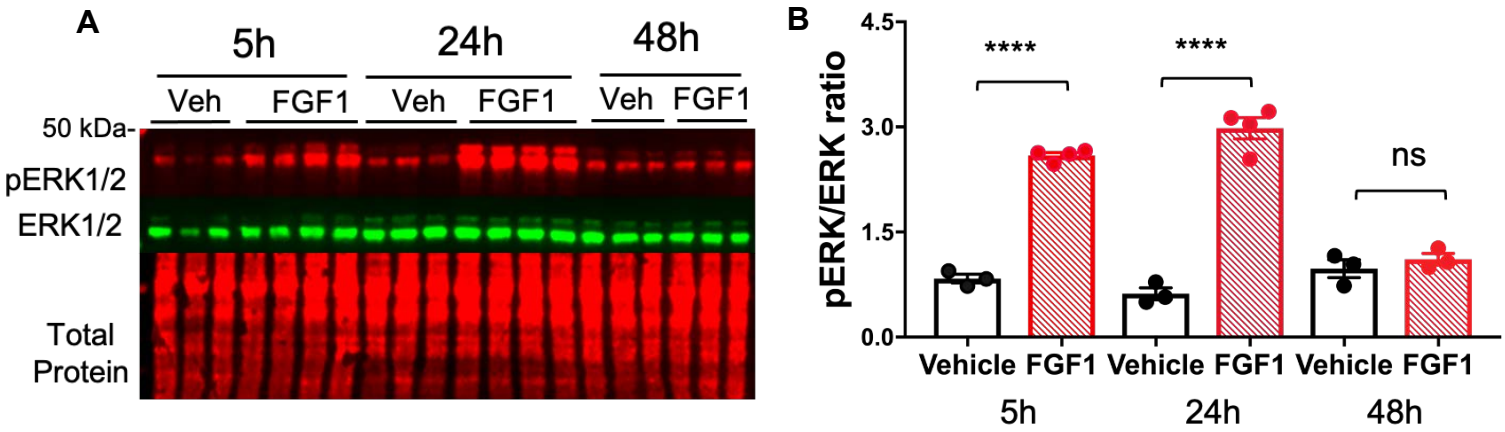
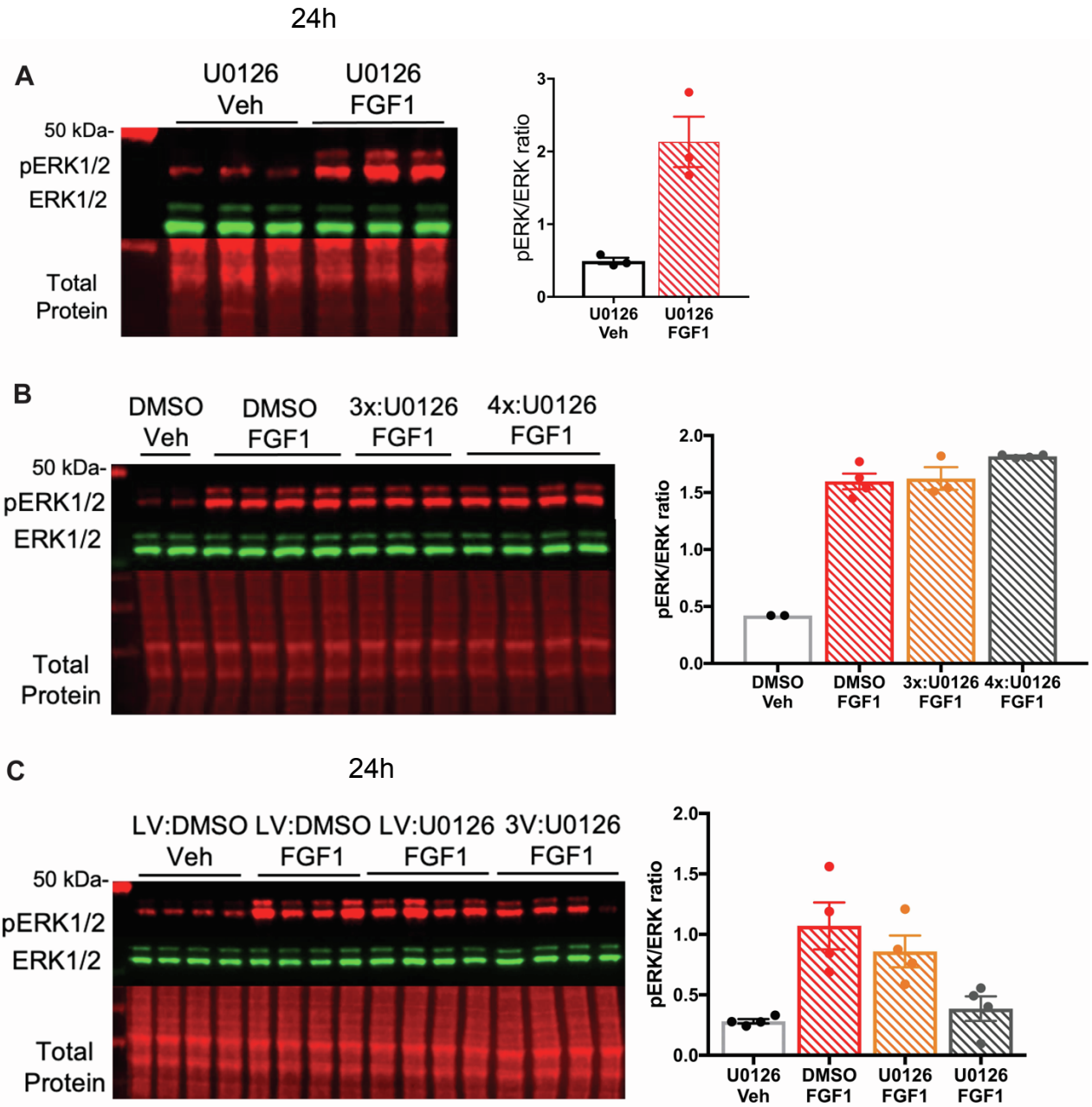


Supplementary Figure 1- Central Administration of FGF1 Induces Sustained ERK1/2 Signaling in the MBH of db/db mice. (Related to Figure 1) A) Representative western blot (left panel) of phosphorylated (red) and total ERK1/2 (green) and total protein (red) from mediobasal hypothalamic punches from adult male db/db mice after a single icv injection of either vehicle or FGF1 (3 ug) and quantitative comparison at B) 5 hours (n=3-4/group, t=24.48 df=5 p=0.0001), 24 hours (n=3-4/group, t=12.21 df=5 p=0.0001), 48 hours (n=3/group, t=-0.0344, df=4, p=0.2121) after injection. pERK1/2 ratio unpaired Welch two sample t-test (one sided) ****P<0.0001.



Supplementary Figure 2- Blockade of Prolonged MAPK/ERK signaling in the MBH induced by central FGF1. (Related to Figure 2) A) Representative western blot (left panel) and quantitative comparison of phosphorylated (red) and total ERK1/2 (green) and total protein (red) (right panel) from mediobasal hypothalamic punches from adult male C57Bl6J mice 24 hours after a icv injection of an inhibitor of MAPK signaling U0126 (5 µg) followed by vehicle or FGF1 into the lateral ventricle and **B)** 24 hours after 3 and 4 repeated injections of U0126 (5 µg) 3h apart after a single icv injection of either vehicle or FGF1. **C)** a single icv injection of FGF1 into the lateral ventricle (LV) or 3rd ventricle (3V) followed by continuous infusion via osmotic pump of 30mM 1ul/hour U0126 or DMSO for 24 hours.