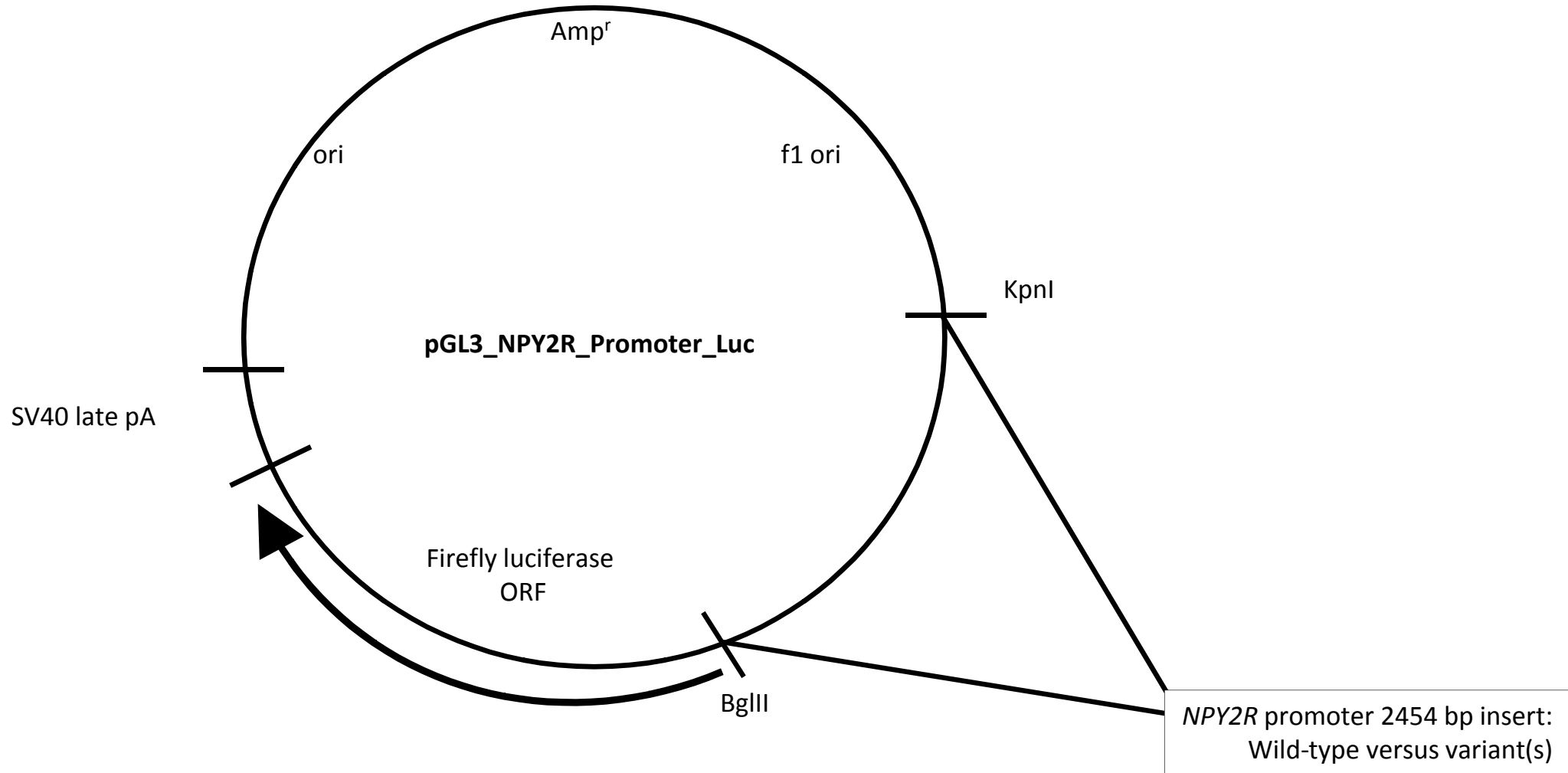


***NPY2R* promoter variants :**

Effect on transfected luciferase reporter expression in neuroendocrine cells



Supplemental Fig. S1. Structure of the promoter/luciferase reporter plasmid for tests of *NPY2R* promoter variation in transfected neuroendocrine cells. Expression of the firefly luciferase reporter is driven by a 2454 bp human *NPY2R* promoter, excised from human genomic DNA, and inserted between the KpnI and BglII sites in the polylinker of pGL3-Basic (Promega). After ligation, variants were created by site-directed mutagenesis, and verified by dideoxy-sequencing. ORF: Open Reading Frame.

On-line Table 1. *NPY2R* promoter variants and obesity: Genetic association in >10,000 subjects. Review of the published literature revealed that studies in >10,000 subjects documented effects of *NPY2R* 5'-genetic variation on obesity or BMI. Variant rs6857715 (C-599-T) is a topic of transcriptional investigation in the current report. Literature citations are in the main References (#2, 3, 6).

Study	Year	Trait	Ancestry	Sex	N	Author	Journal	Variant(s)	Analysis	Effect size	P-value
1	2006	Obesity (dichotomous)	Denmark	Both	5971	S Torekov	Diabetologia	Promoter rs12649641, rs2342676, rs6857530	Regression	-	P=0.02
2	2007	Obesity (dichotomous)	France	Both	1417	A Siddiq	Diabetologia	Promoter rs6857715	Chi-square	Cramer's phi=0.093	P=0.002
3	2011	BMI (continuous)	Utah	Both	2985	S Hunt	Obesity	Promoter rs12649641	Regression, GEE	Beta (slope) =0.8	P=0.008
Total					10373						