miR-7 Regulates GLP-1-Mediated Insulin Release by Targeting β-Arrestin 1

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Supplementary Figure S1. βARR1 expression in pancreatic β cells is reduced by miR-7. βARR1 mRNA levels were measured in INS-1 β cells transfected with miR-7 mimic, inhibitor, or scramble (negative control) for 48 hours. Means ± S.E.M. are shown alongside actual values; *p<0.05 vs miR-scramble.
Supplementary Figure S2. GLP-1-induced phosphorylation of ERK and CREB is significantly attenuated by miR-7. Forty-eight hours after transfection with miR-7 mimic or miR-scramble (negative control), INS-1 β cells were treated with GLP-1 (100 nM) for 10' and the activation of ERK (A) and CREB (B) was assessed in cell lysates by immunoblot. Representative immunoblots from three independent experiments are shown. Means ± S.E.M. are shown alongside actual values; *:p<0.05 vs scramble; #:p<0.05 vs no GLP-1 (vehicle).
### Supplementary Table S1 – Sequences of oligonucleotide primers and product sizes

| Primer | Sequence (5’-3’) | Amplicon (bp) |
|--------|------------------|---------------|
| **βARR1** |                 |               |
| **Forward** | ACG CCA AGA AAG GAG TCT CA | 81 |
| **Reverse** | ATT TAG CCA AGC ACC ACC AC | |
| **GAPDH** |                 |               |
| **Forward** | TGC CAC TCA GAA GAC TGT GG | 85 |
| **Reverse** | GGA TGC AGG GAT GAT GTT CT | |

βARR1: β Arrestin 1;  
GAPDH: glyceraldehyde 3-phosphate dehydrogenase.