

Electronic supplementary material**ESM Table 2** Antibodies used in the experiments

	First antibody (supplier)	Second antibody (supplier)
Immunohistochemical analysis	Insulin (Dako, Carpenteria, CA, USA)	FITC-conjugated (Jackson ImmunoResearch, West Grove, PA, USA)
	Glucagon (Sigma Aldrich, St Charles, MO, USA)	FITC-conjugated (Jackson ImmunoResearch, West Grove, PA, USA)
	Ki67 (Zymed Laboratories/Invitrogen, Carlsbad CA, USA)	Cy3-conjugated (Jackson ImmunoResearch, West Grove, PA, USA)
	GSK-3 β (BD Transduction Laboratories, San Jose, CA, USA)	Histomouse-SP (Zymed Laboratories/Invitrogen Carlsbad CA, USA)
Western blotting	Total GSK-3 α/β^a (BD Transduction Laboratories, San Jose, CA, USA)	
	Phospho-Akt ^a (Ser473) (BD Transduction Laboratories, San Jose, CA, USA)	
	Total Akt ^a (BD Transduction Laboratories, San Jose, CA, USA)	
	Total GSK-3 β^a (BD Transduction Laboratories, San Jose, CA, USA)	
	Phosphorylated GS on Ser 641 and 645 ^a (Biosource/Invitrogen, Carlsbad CA, USA)	
	IRS1 ^a (Upstate, Lake Placid, NY, USA)	
	IRS2 ^a (Upstate, Lake Placid, NY, USA),	
	PDX1 ^a (Santa Cruz Biotechnology, Santa Cruz, CA, USA; SC14664)	
	α -Tubulin ^a (Sigma-Aldrich, St Charles, MO, USA)	
β -Actin ^a (Sigma-Aldrich, St Charles, MO, USA)		

*Horseradish peroxide-conjugated