

ESM TABLES

ESM Table 1: Antibodies used in this paper

Antibody	Brand, Catalogue number, RRID, Dilution	Used in Figures
Insulin	Developmental Studies Hybridoma Bank, University of Iowa, GN-ID4 RRID:AB_2255626 1:500	1a-e.
Insulin	Genetex #GTX39371 RRID:AB_11177138, 1:1000	2c-p, 3b-c, 3d-e, 3f-k, 4e-f, 5f, ESM Fig 1a-d,
Insulin	R&D #MAB1417 RRID:AB_2126533 1:1000	2q-r, 3d-e, ESM Fig 2a-b.
Ki67	Invitrogen #MA5-14520 RRID:AB_10979488, 1:200	1a-b, 2e-f, 3j-k.
NRF2	Cayman Chemicals #10214, 1:250	1c-e,2c-d, ESM Fig 1a-b.
DNA/RNA Oxidative Damage	Abcam #ab62623 RRID:AB_940049, 1:100	2g-h,3b-c.
PDX1	Abcam #AB47308 RRID:AB_777178, 1:250	2q-r, 3d-e, ESM Fig 2a-b.
MAFA	Cell Signaling, #79737, RRID:AB_2799938,1:1000	3f-g.
Cyclin D1	Proteintech #60186-1-Ig RRID:AB_10793718, 1:1000	3h-i
PCNA	Cell Signaling, #2586, RRID:AB_2160343, 1:1600	ESM Fig 1a-b.
Chromogranin A	Proteintech #23342-1-AP, RRID:AB_2879259, 1:400	ESM Fig 1c-d.
Glucagon	Cell Signaling, #2760, RRID: AB_659831, 1:100	ESM Fig 1e.

ESM Table 2: Primers used in this paper

Sequence Name	Forward	Reverse
Beta Actin	AGCCATGTACGTAGCCATCC	CTCTCAGCTGTGGTGGTGAA
Nrf2	AGGACATGGAGCAAGTTTGG	TTCTTTTTCCAGCGAGGAGA
mtDNA	GAGCATCTTATCCACGCTTCC	GGTGGTACTCCCGCT GTAAA
gDNA	CTTCCCCACTGGCCTCAAG	CCAAAACCCAGTGATCCAGC

ESM Table 3: Cadaveric donors' properties

Age Group	Age	Sex	Race/Ethnicity	BMI	HbA1C mmol/mol (%)	Cause of Death
Neonatal	1 day	F	White	14.2	<4 (2.5)	Anencephaly
	1 day	M	White	13.3	38 (5.6)	Anencephaly
	2 months	F	White	13.7	15 (3.5)	Anoxia
	13 months	M	Hispanic or Latino	25.2	38 (5.6)	Anoxia
	15 months	M	White	19.7	30 (4.9)	Head trauma
	15 months	M	Black	17.8	40 (5.8)	Head trauma
	19 months	M	White	16.5	Not available	Anoxia
Child	2 years	M	White	20.2	Not available	Anoxia
	3 years	F	Hispanic or Latino	13	34 (5.3)	Head trauma
	4 years	M	White	19.7	Not available	Head trauma
	5 years	M	White	21.3	34 (5.3)	Head trauma
	7 years	F	Black	18.4	Not available	Anoxia
Adult	26 years	F	White	28.4	34 (5.3)	Stroke
	35 years	M	White	24.7	34 (5.3)	Head trauma
	56 years	M	White	24.4	30 (4.9)	Anoxia