Table S9. Some of the predicted target genes associated with human disease or mouse model with relevant phenotype

GENE SYMBOL	**GENE NAME (eye/brain/pancreas disease)**	**Database Ref**
Human		**OMIM number**
CHM	choroideremia orRab escort protein 1 (choroideremia)	303100
RS1	retinoschisin 1 (retinoschisis)	312700
ARX	aristaless related homeobox (X-linked mental retardation)	300419
LMX1B	LIM homeobox transcription factor 1, beta (glaucoma etc)	161200
EYA1	Eyes absent homolog 1 (cataracts, anterior segment anomaly)	601653
FOXP2	Forkhead box P2 (speech and language disorder)	605317
PHOX2B	Paired-like homeobox 2B (central hypoventiallation syndrome)	603851
PTF1A	Pancreas specific transcription factor 1A (cerebellar agenesis/neonatal diabetes – recessive)	607194
HNF1B	HNF1 homeobox B (non-insulin-dependent diabetes mellitus)	189907
HNF4A	hepatocyte nuclear factor 4, alpha (non-insulin-dependent diabetes mellitus type I)	600281
Mouse		**MGI number**
Arx	aristaless related homeobox	1097716
Barhl2	BarH-like 2 (Drosophila)	1859314
Emx2	empty spiracles homolog 2 (Drosophila)	95388
Gbx2	gastrulation brain homeobox 2	95668
Gli3	GLI-Kruppel family member GLI3	95729
Lmx1b	LIM homeobox transcription factor 1 beta	1100513
Mab21l2	mab-21-like 2 (C. elegans)	1346022
Neurod1	neurogenic differentiation 1	1339708
Nr2e1	nuclear receptor subfamily 2, group E, member 1	1100526
Nkx2-2	NK2 transcription factor related, locus 2 (Drosophila)	97347
Pou3f2	POU domain, class 3, transcription factor 2	101895
Pou4f2	POU domain, class 4, transcription factor 2	102524
Six6	sine oculis-related homeobox 6 homolog (Drosophila)	1341840
Vax1	ventral anterior homeobox containing gene 1	1277163
Zic3	zinc finger protein of the cerebellum 3	106676