

Supplementary materials

Supplementary Table S1. Primer sets for miR-183 genotyping.

Name for Genotyping	Forward primer	Reverse primer	T _m (°C)	Length (bp)
Mouse miR-183	TGAAGAGCTGGTGAGGAGGG TTG	CAAGCAGATGGTACTGGA ACAGGC	60	342

Supplementary Table S2. Primers for the top 10 most likely potential off-target sites.

ID	sequence
OT1-F	TAAGTGGTGAGCGAGCATAAC
OT1-R	CCTCCCATAAGTGGTTGCTAAA
OT2-F	GACTTGTTGAGACTCTGGTGAA
OT2-R	CAGATGACCATGGAACCTTAGAA
OT3-F	CCTGAACCCAGATATTCCCATT
OT3-R	CTTGACTTTGACGTGGTTTGTC
OT4-F	GGACTGACTACAGACAGACAGA
OT4-R	CCTCGAAGCCCTGAGATTATTG
OT5-F	CTTTGAGTTGACATCCCAGCA
OT5-R	ACTCCTCACAAACAATGCACA
OT6-F	CACATCTTGCTTCGACACATC
OT6-R	CAATGGAAACCCTGAGACAATTAG
OT7-F	CCAGATAATACAGGAACGAGAGG
OT7-R	ACTGTTGTTCCCTCCTATGC
OT8-F	AGGTTGACACAAACAGATGGA
OT8-R	ACCACTGAAAGATTATAGAGCAGAA
OT9-F	GACATCTGTAATGAAGTTATTTGGG
OT9-R	GTGGATGAACTGTGACGATCTA
OT10-F	CAGTAGAGACACTGTGGGTTATG
OT10-R	ACAGAAGGTGTAGTAGGGAGAT

Supplementary Table S3. Primer sets of Rnf217 and Bbs genes for qRT-PCR.

Gene	Forward primer	Reverse primer
Rnf217	AGCTCTCAGGTACAACCTTGGC	CTTGATAGAGTCCTCATGGGT
Bbs1	GGGGAGTACAAGCTGGTGGTG	GGTGGCAGCCGAGGCTGGCAG
Bbs2	GCGGGCAAGGTTTTTCATTCAT	CAAGACTCCCGAACCCAGGCA
Bbs3	AATCACCCAGATATTAAGCACCGT	AATGCTCTCTAAGCACAGCAACTG
Bbs4	CTTGGGATGAAAACCTCAGGTT	GGATATAGTGGAGATGGATCAG
Bbs5	GCAGTGCACAGAGCATATGAA	TCTTATCATAACACATGCTCCTG
Bbs6	GTCAGACACAAGGTTTCATCAC	TCCATACTTCGTGTCAATGAG
Bbs7	GAAGCTGTGCCAGTGTTCAAG	AAAGCCTCTAATCTCGGACCC
Bbs8	CAAGCTGTCAGGCCAATCACT	TCTGACGAATCTTCCAGATGA
Bbs9	GGGAACGGCCACGATAAAATC	ATCTTCAGCCTGAGGCCACC
Bbs10	CCCTTAGCCAGGATGATAGTG	GATTGCATGAAGTCCTCTGAG

Supplementary Table S4. Developmental expression of Rnf217, Rnf2, and BBSome genes

in murine retina.

Gene	Alias	EE13.5	E18.5	PP11	PP77	P14P14	P30P30	PP4545
Bbs1		10.322	11.293	9.976	26.145	33.268	30.553	29.877
Bbs2		11.06	11.328	11.793	22.287	31.206	39.835	46.359
Bbs3	Arl6	19.62	21.38	21.589	70.41	78.844	76.764	75.564
Bbs4		13.265	13.724	14.972	28.947	38.045	49.901	50.299
Bbs5		5.016	4.98	6.768	22.7637	34.965	32.33	31.895
Bbs6	Mkks	11.617	9.173	6.852	13.1377	15.87	15.1	14.296
Bbs7		N/A	N/A	N/A	N/A	N/A	N/A	N/A
Bbs8	Ttc8	13.623	13.046	10.995	36.2877	51.419	55.078	56.628
Bbs9		9.471	9.617	11.362	40.145	41.497	40.168	38.126
Bbs10		2.686	2.531	1.547	2.883	3.094	4.181	4.803
Rnf217		6.159	10.609	6.451	3.965	2.607	1.955	1.41
Rnf2		30.212	25.789	26.104	22.722	17.814	16.211	14.631

Supplementary Table S5. Primer set for over-expressing Rnf217 in 661W cells.

Gene	Forward primer	Reverse primer	Tm (°C)	Length (bp)
Rnf217	GGTACCATGGATTACAAGGATGA CGACGATAAGATGGGCGAGGAGC AGAGCACG	CTCGAGTTACCAGTGC ATACCTGTCCG	58	1,548

Supplementary Table S6. Primer sets for AAV-mediated miR-183 and Rnf217 overexpression.

ID	sequence
mmu-mir-183 (17362-3)-P1	ACGAGCTGTACAAGGCTAGCTAGAGTAGGTTGTAGGACCTCCAG
mmu-mir-183 (17362-3)-P2	TCGATAACCGGTTTAAAGCTTGAAACAGAGGTCTAGGCAG
Rnf217 (20229-2)-P1	GGAGGTAGTGGAATGGATCCCGCCACCATGGGCGAGGAGCAGAGCACGGTG
Rnf217(20229-2)-P2	TCACCATGGTGGCGGGATCCCAGTGCATACCTGTCCGTGATC