

Library Number	RMK018
Library Name	Cell Death Library
Old Document Name	210405 cell death library oligos
Library Purpose	CRISPR/Cas9 Knockout of genes from apoptosis, necrosis, and ferroptosis genes in mouse T cells
Location	oligos ordered from Twist
Designer Name	Kate Beier/Darren Heintzman
Designing Date	2019-04-05
Design Reference	Mouse CRISPR Knockout Pooled Library (Brie) (Addgene#73632) (Doench et al., 2016)
Usage Reference	Kate Beier/Darren Heintzman
Species	Mouse (Mus musculus)
Total Gene #	52
Total Target #	218
Gene Group	
1. Negative Controls	10 Nontargeting controls (NTC)
2. Positive Controls	Tsc2
3. Cell death genes	52
Target Number	218
1. Negative Controls	10*1=10
2. Positive Controls	1*4=4
3. Cell death genes	51*4=204

Number	Target.Gene.Symbol	sgRNA.Target.Sequence
1	Bcl2	ACATCTCTGCGAAGTCACGA
2	Bcl2	TGTCACAGAGGGGCTACGAG
3	Bcl2	ACCTGACGCCCTTCACCGCG
4	Bcl2	GTGGCAACGAGGGGCTGAG
5	Bcl2l1	AGTAAACTGGGGTCGCATCG
6	Bcl2l1	CTGCTCAAAGCTCTGATACG
7	Bcl2l1	TGTCGAAGAGAATAGGACTG
8	Bcl2l1	CAGGCGATGAGTTTGAAGCTG
9	Bcl2l2	ACTTTGTAGGCTATAAGCTG
10	Bcl2l2	AGCCCAGCAACGCTTCACCC
11	Bcl2l2	TTCCAAGGGGGCCCTAACTG
12	Bcl2l2	TGGGGTCACGTGTAGCTGAG
13	Bcl2l10	AAGGCCGCCTCGACAGACGT
14	Bcl2l10	CACTGCATGAACGCACTAGA
15	Bcl2l10	ATTCATAAGCGTCCCCGCGA
16	Bcl2l10	ACTACATATTCTTCTGCGCA
17	Bnip1	GATGAAGAGTTTCCTAGGTG
18	Bnip1	CAGCATTGAGGCCATCACCA
19	Bnip1	AGGACAACGAGAGCAGCGAG
20	Bnip1	CCACATCGCACACGCATCCC
21	Bnip3	GTGAAAACGGACTTACTTGG
22	Bnip3	TGGCGAGAAAAACAGCACTC
23	Bnip3	GCTGAAGTGCAGTTCTACCC
24	Bnip3	GTCACCATTATAAATAGAGA
25	Bcl2l11	AGGTAATCCCGACGGCGAAG
26	Bcl2l11	GTTGACTTGTCAACTCAT
27	Bcl2l11	CAACCACTATCTCAGTGCAA
28	Bcl2l11	AAAAGAGAAATACCCACTGG
29	Bmf	GCCCTGGCATCACAACCTCGG
30	Bmf	CAATACCGCGCGGTGTGCCG
31	Bmf	GAAGAGCTGGAGTCGACTGA
32	Bmf	TCTAGCTCCTCCACACTG
33	Bid	CCACAACATCCAGCCCACAC
34	Bid	CATGAATGGCAGCCTGTCCGG
35	Bid	GCCAGCCGCTCCTTCAACCA
36	Bid	GCCTGTGCAAGCTTACTGGG
37	Bik	TGCCTGGGATTGCTATACAC
38	Bik	TACAGCCGGACAGGTGTCAG
39	Bik	CAAGACTGTTCCACACGACC
40	Bik	GACGGGGGCTCCGCAGACAC
41	Bax	GGACACGGACTCCCCCGAG

Number	Target.Gene.Symbol	sgRNA.Target.Sequence
42	Bax	GTTTCATCCAGGATCGAGCA
43	Bax	CCAGTTCATCTCCAATTCGC
44	Bax	CAACTTCAACTGGGGCCGCG
45	Bak1	GCCCACAGCCTATTTAAGAG
46	Bak1	GGAACTCTGTGTCGTAGCGC
47	Bak1	GGTAGACGTACAGGGCCAGA
48	Bak1	GCAGGAGGCTCTTACCAGAA
49	Bad	TCGCCACAGTTCGTACCCAG
50	Bad	AGACGCTAGTGCTACAGATA
51	Bad	GCCACCAACAGTCATCATGG
52	Bad	GTTGCTCCCCAGGAGACCTG
53	Bag1	CCAAACCGAGGAAGTAACTG
54	Bag1	GCCCGGGACTCCGACTGGCG
55	Bag1	CGGGCATGACCGATCCACCA
56	Bag1	GTGACGATCACGCTGAGTCT
57	Cad	CGCAGGGGTACCCGACCGTG
58	Cad	AGGATTAGAACCTTTCGTGG
59	Cad	ATGGTGAGTGCCACCACAA
60	Cad	CTCAGAAACTCTGTTACGGG
61	Diablo	TCAGTAACGAAGCATTGATG
62	Diablo	GAGACCTACCTTAGTATACT
63	Diablo	GCCAACCGCTGTCATCCAAG
64	Diablo	TGGGAAGATGAATTCACAGG
65	Xiap	TTTCAGACACCATATACCCG
66	Xiap	AGCACTAGCTAACTCTCTGG
67	Xiap	CTTGGGAACAGCATGCCAAG
68	Xiap	ATGGACATCCTCAGTTAACA
69	Fadd	TAGATCGTGTGCGCGCAGCG
70	Fadd	AAGCTGGAGCGCGTGCAGAG
71	Fadd	TTCGTTTGCTCACGCGCTCG
72	Fadd	GCGCCTGGACGACTTCGAGG
73	Tradd	AAACTGACGTGTGACTGCAC
74	Tradd	CGCAACTGGACGATGAGCTG
75	Tradd	GATCCTGTCTGAAGCCTACA
76	Tradd	CCTCCAAGCCTACCGCGAGG
77	Aifm1	CTGCCTAATATTGAGAACGG
78	Aifm1	ACCATGGAAAAAGTCAAACG
79	Aifm1	GTCAATTACAGTTATCGGCG
80	Aifm1	AAGTCTGTCTGCCATCGATA
81	Ripk1	CAGACTGAGACACAGTCGAG
82	Ripk1	CCTGAATTTGACCTGCTCGG

Number	Target.Gene.Symbol	sgRNA.Target.Sequence
83	Ripk1	AATCCTTGAGTACTGTCCAA
84	Ripk1	GAAAGGAAGGATAATCGTGG
85	Ripk3	GAGTTAATGATTCATTGCTG
86	Ripk3	GGCCTGTCCACGTTTCAGGG
87	Ripk3	GTGTAGGAAGAAGATATCCT
88	Ripk3	CGGACACGAAGTCCCCTGG
89	Mlkl	GCACACGGTTTCCTAGACGC
90	Mlkl	GATGCAGTTGCAAATTAGCG
91	Mlkl	AGGAACATCTTGGACCTCCG
92	Mlkl	GGCTGCGCACACTCATTGTG
93	Slc39a7	TCACGTGAGGAATTACACCA
94	Slc39a7	TCACAAATTTCTCCACCAG
95	Slc39a7	TCACATGAAGATTTCCACCA
96	Slc39a7	GGTGGAGGAACGCATCACCC
97	Nlrp3	CCTCTCTGCTCATAACGACG
98	Nlrp3	GCTGCGTGTAGCGACTGTTG
99	Nlrp3	GTTCTTTATCCACTGCCGAG
100	Nlrp3	CTCTACCAGAATGGACCAG
101	Tnfrsf1a	AGTTGCAAGACATGTCTGGAA
102	Tnfrsf1a	AGACCTAGCAAGATAACCAG
103	Tnfrsf1a	GATGGGGATACATCCATCAG
104	Tnfrsf1a	GGATCCCGTGCCTGTCAAAG
105	Fasl	AGGACCACAACACAAATCTG
106	Fasl	CTTCACTCCAGAGATCAGAG
107	Fasl	CCTCTGAAAAAAAAAGAGCCG
108	Fasl	GGAAGTGGCAGAACTCCGTG
109	Fas	CAGTTAAGAGTTCATACTCA
110	Fas	TATTTATATATCGAAAGTAC
111	Fas	CATTTGCATACTCACACGAC
112	Fas	GAGGACTGCAAAATGAATGG
113	Tnfsf12	GGCTGACCACGACCAGCAGG
114	Tnfsf12	GCCCAGGCTCAGCACCAGCG
115	Tnfsf12	CAACGCTGTCTGCCAGGTG
116	Tnfsf12	GGAAGTGAATCCCCAGACAG
117	Tnfrsf25	GCAAAGTCGGACACCCACTG
118	Tnfrsf25	CCTGGACTTACCAGTGACCA
119	Tnfrsf25	GGCTACAACACCAGTCCATG
120	Tnfrsf25	GTTGCCTACCAACTGGACAG
121	Tnfsf10	CTCCATTCTAAAGAGCACG
122	Tnfsf10	CTCACATTACTGGGATCACT
123	Tnfsf10	GTTCAAGATCTCTCCATCAG

Number	Target.Gene.Symbol	sgRNA.Target.Sequence
124	Tnfsf10	AGTACTCCTCCCTTGCCCAG
125	Tnfrsf10b	TAGAATGTACCTGCTAGACA
126	Tnfrsf10b	AAATGACTCTAACCACAACA
127	Tnfrsf10b	ACGGTGTGTCGATGCAAACC
128	Tnfrsf10b	TGGTTGCTCTGTATAAAAAG
129	Casp1	GAGGGCAAGACGTGTACGAG
130	Casp1	TTGTAATGAAGACTGCTACC
131	Casp1	GTATCCAGGAGGGAATATGT
132	Casp1	AAACATTACTGCTATGGACA
133	Casp3	CATGCAGAAAGACCATACAT
134	Casp3	CGGGGTACGGAGCTGGACTG
135	Casp3	AACCTCAGAGAGACATTCAT
136	Casp3	AGAGCGAGATGACATTCCTT
137	Casp7	GGACGGTACTTCAAACCC
138	Casp7	AACTTCGACAAAGCGACAGG
139	Casp7	GATATGCTTTAGGCATGCCG
140	Casp7	TCCATGCGGTACAGATAAGT
141	Casp8	GATTATGAAAGATCAAGCAC
142	Casp8	CTTCCTAGACTGCAACCGAG
143	Casp8	ATGATCAGACAGTATCCCCG
144	Casp8	CAAGAAGCAGGAGACCATCG
145	Casp9	CTTCACGCGGACATGATCG
146	Casp9	CTGGCTTCACTCTTGCAAAG
147	Casp9	GTCACAGACCTTGAGACCCG
148	Casp9	GAAGAACGACCTGACTGCCA
149	Cflar	ATGATCAAGCAGATTCTTAG
150	Cflar	CTTACCTATAATCAGAAACC
151	Cflar	TGGGTTATGTCATGTGACTT
152	Cflar	CCAAAATTACTTACTGGACT
153	Sh2d1a	AGAAGCTCTTACTCGCTACC
154	Sh2d1a	GATGCAGTGACTGTGTACCA
155	Sh2d1a	AACAGGTTCTTGGAGTGCCG
156	Sh2d1a	CACACAGGCAGTACACGCCA
157	Il2ra	GTGTCTGTATGACCCACCCG
158	Il2ra	ATCTTGAGATGCTAATAGC
159	Il2ra	GAGAGGTTTCCGAAGACTAA
160	Il2ra	GAATCTTCATGTTTCCAAGG
161	Atg3	GTAGATACATATCACAACAC
162	Atg3	GACAGGCTACCCTAGACACA
163	Atg3	GGGTGTAATCACCCAGAAG
164	Atg3	TAACAGTTCCATGCTACAAG

Number	Target.Gene.Symbol	sgRNA.Target.Sequence
165	Atg7	TCTCCTACTCCAATCCCGTG
166	Atg7	TGGGGTCCATACATCCACTG
167	Atg7	CTTAAAAGCCTCAAGTGTGT
168	Atg7	CTTGAATAAGAAGTAGGGCA
169	Hrk	TGCCCCGTGTCCCCGGCATCG
170	Hrk	CGCGACGCCGCATGGCGCGT
171	Hrk	GCGCCATGCGGGCGTCGCGCG
172	Hrk	CGCGGGCCCCCGGCCGTGTG
173	Tsc2	TGAACCACATGGCTATGACG
174	Tsc2	CACAGGGTGATAATGAACAG
175	Tsc2	CAGCTCAAAGACCCTTGAG
176	Tsc2	CTGATCCTAGCACACATGTG
177	Tnfrsf21	GCCTGGTAAAGGTCCCCGCG
178	Tnfrsf21	AAGGAGACAGACAACGTCTG
179	Tnfrsf21	ACAATACGAGCTCAACCAGT
180	Tnfrsf21	GATGCACTCTCGGTCACTCA
181	Bbc3	TCGCGGGCTAGACCCTCTAC
182	Bbc3	GGTCACCGCAGCCGGCCCAG
183	Bbc3	AGGCTGCAGGATACAGCGGA
184	Bbc3	GGGCGACTCTAAGTGCTGCT
185	Daxx	TCAGCACATCTCCATAATCG
186	Daxx	GGAGACATCAGACCACCCTG
187	Daxx	GCGGGCCTCCTGCAAATACG
188	Daxx	CAAGGACTCGCGGTTCCCGG
189	Apaf1	TACAACGCTCTGCTACACGA
190	Apaf1	GAAGAAATCATTGACCCAG
191	Apaf1	GCTTCCACTTAATATTGAGG
192	Apaf1	CATCCTGAGAAAAACACGCG
193	Trp53	AACAGATCGTCCATGCAGTG
194	Trp53	TCCACCCGGATAAGATGCTG
195	Trp53	GAAGTCACAGCACATGACGG
196	Trp53	GTGTAATAGCTCCTGCATGG
197	Traf1	TGCTGGCGGTCTTAAAGGAG
198	Traf1	CCTGGAGGTAGACTGCTACC
199	Traf1	GCACAGTCTGCGACTCATGG
200	Traf1	GGGGAGCCCACAATCCATGC
201	Traf2	AGTACAAACCTTGTTACTCA
202	Traf2	AGATAACGCTGCCCGCAGAG
203	Traf2	CGGACCAGGCCTTTACATGC
204	Traf2	CACAGGTAAAGGGAACTTG
205	Tnfrsf1b	AGGAAGTCAACACTCACATG

Number	Target.Gene.Symbol	sgRNA.Target.Sequence
206	Tnfrsf1b	TGAGGCAAGCATGTATACCC
207	Tnfrsf1b	TGTAGGGTGTCAAGACAACC
208	Tnfrsf1b	GCCCACAAGATCCCAACCCC
209	BRDN0000737766	TTCTCCATACCGTAACTCCG
210	BRDN0000737985	TTCTGATTAGATACGTACGA
211	BRDN0000738020	TTGAACACGACACCCGTGCC
212	BRDN0000737992	TTGAAGTAGGGTCGGATTGA
213	BRDN0000738111	TTGAATCCGAGGCGCCGATG
214	BRDN0000737971	TTGAGCGGACCCCCCTACAA
215	BRDN0000737511	TTGATAAACCGCGGCCGAAA
216	BRDN0000738347	TTGCACCCCAGTTCGTTGC
217	BRDN0000738211	TTGCAGCAACGGCGACGGCT
218	BRDN0000737532	TTGCGTGTGCGTTGTTAACG