seq_align_ORF

_____ Section 1

	(1)	1 10 20 30 40 58
MIOX gene codon-optimized	(1)	ATGAAAGTTGATGTTGGTCCTGATCCGTCTCTGGTTTATCGTCCAGACGTGGATCCGG
MIOX gene from mouse	(1)	ATGAAGGTCGATGTGGGCCCAGACCCTTCCCTGGTCTATCGACCCGATGTGGACCCAG

_____ Section 2

	(59)	59 70 80 90 100 116
MIOX gene codon-optimized	(59)	AGATGGCAAAGAGCAAAGACTCTTTCCGTAACTACACTTCTGGTCCGCTGCTGGATCG
MIOX gene from mouse	(59)	AGATGGCCAAAAGCAAGGACAGCTTCCGAAACTATACTTCAGGCCCGCTGCTGGATCG

_____ Section 3

	(117)	117 130 140 150 160 174
MIOX gene codon-optimized	(117)	CGTTTTCACGACCTACAAACTGATGCACACCCATCAGACCGTTGATTTCGTGAGCCGC
MIOX gene from mouse	(117)	TGTCTTTACCACATACAAGCTCATGCACACTCACCAGACTGTGGACTTCGTCAGCAGG

_____ Section 4

	(175)	175 180 190 200 210 220 232
MIOX gene codon-optimized	(175)	AAGCGCATCCAGTATGGTTCTTTCTCTTACAAAAAGATGACCATTATGGAGGCTGTTG
MIOX gene from mouse	(175)	AAGCGCATCCAGTATGGAAGCTTCTCTTACAAGAAGATGACCATCATGGAGGCTGTGG

_____ Section 5

	(233)	233 240 250 260 270 280 290
MIOX gene codon-optimized	(233)	GTATGCTGGATGACCTGGTTGACGAAAGCGACCCTGACGTTGACTTCCCTAACTCTTT
MIOX gene from mouse	(233)	GCATGCTGGATGATCTGGTGGACGAATCTGACCCAGACGTAGATTTCCCCAACTCCTT

_____ Section 6

	(291)	291 300 310 320 330 348
MIOX gene codon-optimized	(291)	CCATGCATTTCAGACCGCCGAAGGTATTCGTAAAGCTCATCCTGATAAAGATTGGTTC
MIOX gene from mouse	(291)	CCACGCGTTCCAGACCGCGGAGGGCATCCGGAAAGCCCACCCGGACAAGGACTGGTTC

_____ Section 7

	(349)	349 360 370 380 390 406
MIOX gene codon-optimized	(349)	CACCTGGTCGGTCTGCTGCACGACCTGGGTAAGATCATGGCGCTGTGGGGCGAACCAC
MIOX gene from mouse	(349)	CACCTGGTCGGACTTTTGCACGATCTGGGGAAAATTATGGCTCTGTGGGGGGAACCTC

_____ Section 8

	(407)	407 420 430 440 450 464
MIOX gene codon-optimized	(407)	AATGGGCGGTAGTGGGCGATACTTTCCCGGTGGGCTGCCGCCCACAGGCATCCGTGGT
MIOX gene from mouse	(407)	AGTGGGCTGTTGTTGGAGACACGTTCCCCGTGGGCTGCCGTCCCCAGGCCTCTGTGGT

_____ Section 9

	(465)	465 470 480 490 500 510 522
MIOX gene codon-optimized	(465)	CTTCTGCGACTCTACCTTCCAGGATAACCCGGATCTGCAGGATCCGCGCTATTCCACC
MIOX gene from mouse	(465)	GTTCTGTGACTCTACTTTCCAGGACAATCCTGACCTCCAGGATCCTCGATACAGCACA

_____ Section 10

	(523)	523 530 540 550 560 570 580
MIOX gene codon-optimized	(523)	GAACTGGGCATGTACCAGCCGCATTGCGGCCTGGAGAACGTTCTGATGTCTTGGGGTC
MIOX gene from mouse	(523)	GAACTCGGCATGTACCAGCCTCACTGTGGACTAGAGAACGTCCTTATGTCCTGGGGCC

——— Section 11

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                               581        590        600        610        620        638
MIOX gene codon-optimized (581) ACGACGAGTACCTGTATCAGATGATGAAATTCAACAAATTCTCCCTGCCGTCCGAGGC
MIOX gene from mouse      (581) ATGATGAGTACCTATACCAGATGATGAAGTTCAACAAGTTCTCCCTGCCTTCAGAGGC
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——— Section 12

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                               639        650        660        670        680        696
MIOX gene codon-optimized (639) ATTTTACATGATCCGTTTTCACTCCTTCTACCCGTGGCATACCGGTGGCGATTATCGT
MIOX gene from mouse      (639) CTTCTACATGATCCGATTCCACTCCTTCTATCCGTGGCACACCGGCGGTGACTACCGG
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——— Section 13

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                               697        710        720        730        740        754
MIOX gene codon-optimized (697) CAGCTGTGCTCTCAGCAGGATCTGGATATGCTGCCGTGGGTTCAGGAGTTCAATAAAT
MIOX gene from mouse      (697) CAGCTGTGCAGCCAGCAGGACCTGGATATGCTGCCCTGGGTGCAAGAGTTCAACAAGT
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——— Section 14

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                               755  760       770        780        790        800        812
MIOX gene codon-optimized (755) TCGACCTGTATACCAAATGCCCTGACCTGCCAGATGTTGAATCCCTGCGCCCATACTA
MIOX gene from mouse      (755) TTGATCTCTACACGAAGTGCCCTGACCTACCGGATGTGGAGAGCCTGCGGCCCTACTA
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——— Section 15

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                               813        820        830        840        858
MIOX gene codon-optimized (813) CCAAGGCCTGATTGACAAATACTGCCCGGGCACCCTGTCCTGGTAA
MIOX gene from mouse      (813) TCAAGGGCTGATTGACAAGTACTGCCCGGGCACCCTGAGCTGGTGA
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