

Not1 site-*Drosophila Kozak sequence*-**ATG**-codon optimized TDP-43-**Stop codon**-**Xba1 site**

TCC **GCGGCCGCATCAAC**ATGAGCGAATACATTCCGGGTCACGGAGGATGAGAACGATGAGCCCATC
GAGATCCCTTCGGAGGACGATGGCACGGTTCTGCTCTCACCGTTACCGCCCAGTTTCCGGGAGCG
TGCGGTCTGAGGTATCGTAATCCCGTGTCCCAGTGCATGAGGGGCGTGCGCCTGGTCGAGGGCAT
ACTGCACGCTCCTGACGCTGGCTGGGGCAATTTGGTGTACGTGGTGAACACCCGAAGGATAACAA
GAGGAAGATGGATGAGACAGACGCCTCCAGTGCGGTGAAGGTGAAACGAGCGGTCCAAAAGACTA
GTGACCTTATAGTTCTGGGACTTCCGTGGAAAACGACAGAGCAGGATTTGAAAGAATACTTCTCGAC
CTTCGGAGAGGTATTGATGGTGAAGTGAAGAAGGATCTTAAGACTGGCCATAGTAAAGGCTTTGGT
TTCGTACGCTTCACGGAGTATGAAACCCAAGTGAAGGTTATGTCGCAGCGCCATATGATTGACGGAC
GTTGGTGCATTGTAAGCTGCCAACAGCAAGCAGAGTCAAGATGAGCCCCTCCGCAGCCGAAAAG
TGTTCTCGGTGCGCTGTAAGTACTGAGGACATGACAGAGGACGAACTCCGAGAATTCTTTTCCCAATATGG
TGACGTTATGGACGTGTTTCATCCCGAAACCTTTTCGGGCCTTCGCATTTCGTACCTTTGCTGACGAC
CAGATAGCACAGTCCCTCTGCGGAGAAGATCTGATCATTAAAGGGCATCAGCGTGACATCTCCAACG
CTGAACCAAAGCACAATAGCAACCGTCAGTTGGAGCGCTCGGGACGGTTCGGCGGTAATCCCGGTG
GCTTCGGTAACCAGGGCGGATTCGGCAATAGCCGGGGTGGAGGTGCGGGACTGGGAAACAACCAG
GGTTCGAATATGGGCGGTGGCATGAACTTTGGAGCCTTTAGCATCAACCCAGCTATGATGGCGGCT
GCACAGGCCGCGTTGCAATCGAGTTGGGGTATGATGGGCATGCTGGCATCCCAGCAAATCAGAGT
GGACCCTCCGGCAATAACCAGAATCAAGGCAATATGCAGCGCGAACCAAATCAGGCCTTTGGCTCC
GGAAACAACCTGTAAGTCCGGCAGCAATTCGGGCGCAGCCATTGGATGGGGCAGCGCCTCCAATGC
CGGTAGCGGCAGCGGCTTCAACGGCGGCTTTGGCAGTTCGATGGATAGTAAGAGCTCGGGTTGGG
GCATG**TAA****TCTAG****TAA**

Figure S3: Sequence of codon optimized human wild-type TDP-43.