

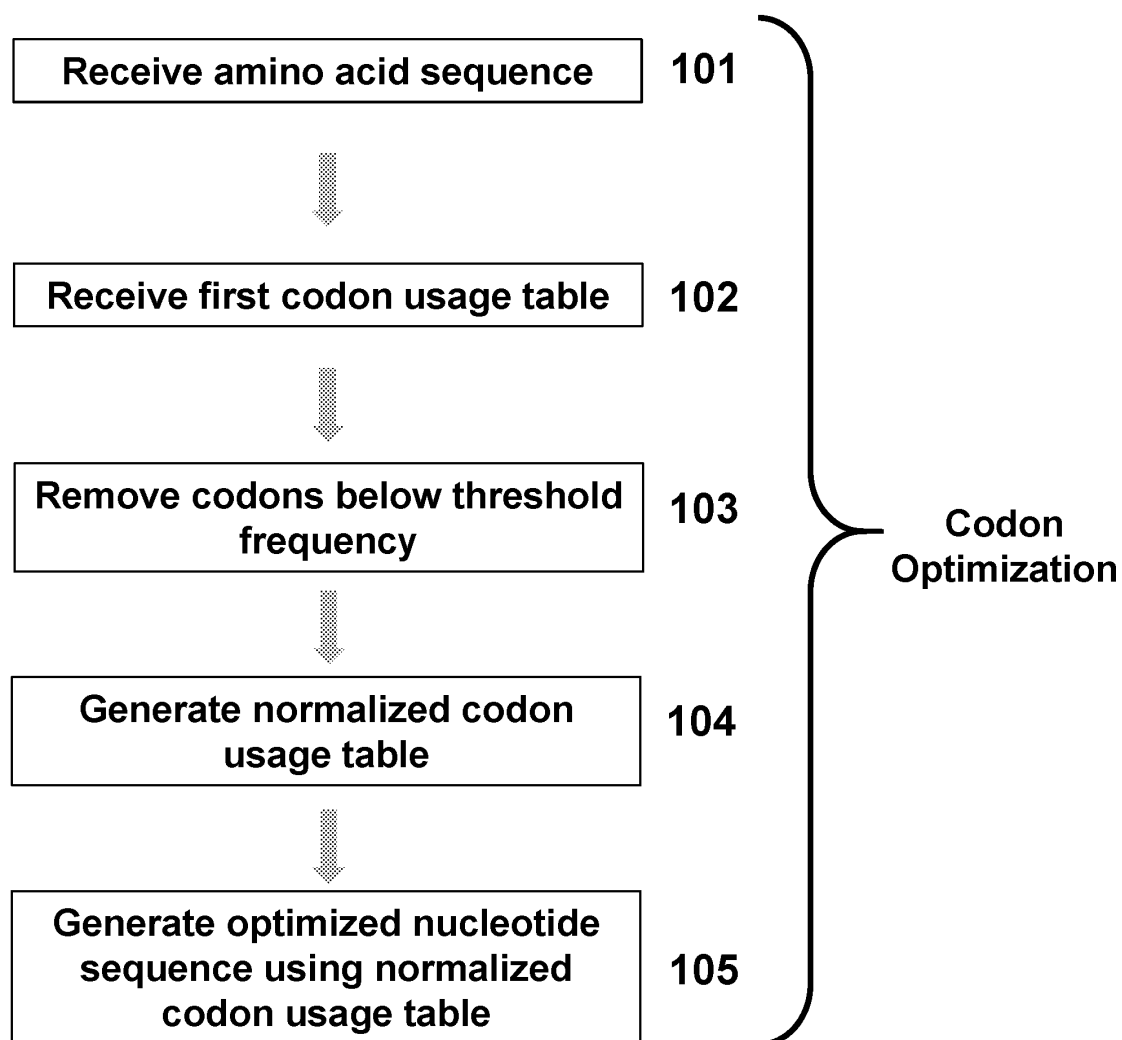
Figure 1

Figure 2A

Codon	Amino acid	Fraction	Codon	Amino acid	Fraction
TAA	*	0.28	ATG	M	1
TAG	*	0.2	AAT	N	0.47
TGA	*	0.52	AAC	N	0.53
GCT	A	0.26	CCT	P	0.29
GCC	A	0.4	CCC	P	0.32
GCA	A	0.23	CCA	P	0.27
GCG	A	0.11	CCG	P	0.11
TGT	C	0.45	CAA	Q	0.27
TGC	C	0.55	CAG	Q	0.73
GAT	D	0.46	CGT	R	0.08
GAC	D	0.54	CGC	R	0.19
GAA	E	0.42	CGA	R	0.11
GAG	E	0.58	CGG	R	0.21
TTT	F	0.45	AGA	R	0.2
TTC	F	0.55	AGG	R	0.2
GGT	G	0.16	TCT	S	0.18
GGC	G	0.34	TCC	S	0.22
GGA	G	0.25	TCA	S	0.15
GGG	G	0.25	TCG	S	0.06
CAT	H	0.42	AGT	S	0.15
CAC	H	0.58	AGC	S	0.24
ATT	I	0.36	ACT	T	0.25
ATC	I	0.47	ACC	T	0.36
ATA	I	0.17	ACA	T	0.28
AAA	K	0.43	ACG	T	0.11
AAG	K	0.57	GTT	V	0.18
TTA	L	0.07	GTC	V	0.24
TTG	L	0.13	GTA	V	0.12
CTT	L	0.13	GTG	V	0.46
CTC	L	0.2	TGG	W	1
CTA	L	0.07	TAT	Y	0.44
CTG	L	0.41	TAC	Y	0.56

Figure 2B

Codon	Amino acid	Fraction	Codon	Amino acid	Fraction
TAA	*	0.28	ATG	M	1
TAG	*	0.2	AAT	N	0.47
TGA	*	0.52	AAC	N	0.53
GCT	A	0.26	CCT	P	0.29
GCC	A	0.4	CCC	P	0.32
GCA	A	0.23	CCA	P	0.27
GCG	A	0.11	CCG	P	0.11
TGT	C	0.45	CAA	Q	0.27
TGC	C	0.55	CAG	Q	0.73
GAT	D	0.46	CGT	R	0
GAC	D	0.54	CGC	R	0.21
GAA	E	0.42	CGA	R	0.12
GAG	E	0.58	CGG	R	0.23
TTT	F	0.45	AGA	R	0.22
TTC	F	0.55	AGG	R	0.22
GGT	G	0.16	TCT	S	0.19
GGC	G	0.34	TCC	S	0.23
GGA	G	0.25	TCA	S	0.16
GGG	G	0.25	TCG	S	0
CAT	H	0.42	AGT	S	0.16
CAC	H	0.58	AGC	S	0.26
ATT	I	0.36	ACT	T	0.25
ATC	I	0.47	ACC	T	0.36
ATA	I	0.17	ACA	T	0.28
AAA	K	0.43	ACG	T	0.11
AAG	K	0.57	GTT	V	0.18
TTA	L	0	GTC	V	0.24
TTG	L	0.15	GTA	V	0.12
CTT	L	0.15	GTG	V	0.46
CTC	L	0.23	TGG	W	1
CTA	L	0	TAT	Y	0.44
CTG	L	0.47	TAC	Y	0.56

Figure 3

Codon	Amino Acid	Frequency (%)
AAA	X	15
BBB	X	20
CCC	X	8
DDD	X	38
EEE	X	8
FFF	X	11
GGG	Y	60
HHH	Y	40

Figure 4A

Codon	Amino Acid	Frequency (%)
AAA	X	19
BBB	X	24
DDD	X	42
FFF	X	15
GGG	Y	60
HHH	Y	40

Figure 4B

Codon	Amino Acid	Frequency (%)
AAA	X	18
BBB	X	24
DDD	X	45
FFF	X	13
GGG	Y	60
HHH	Y	40

Figure 5

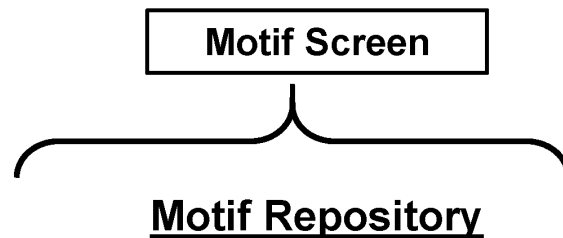
X Y Y X X X



501

BBB GGG GGG DDD AAA DDD

Figure 6



If the nucleotide sequence is DNA, it is screened for the following motifs (1-6):

1. TATCTGTT
2. TTTTTT
3. AAGCTT
4. GAAGAGC
5. TCTAGA
6. 5'-X1ATCTX2TX3-3', wherein X1, X2 and X3 are independently selected from A, C, T or G

If the nucleotide sequence is RNA, it is screened for the following motifs (7-12):

7. UAUCUGUU
1. UUUUUU
2. AAGCUU
3. GAAGAGC
4. UCUAGA
5. 5'-X1AUCUX2UX3-3', wherein X1, X2 and X3 are independently selected from A, C, U or G

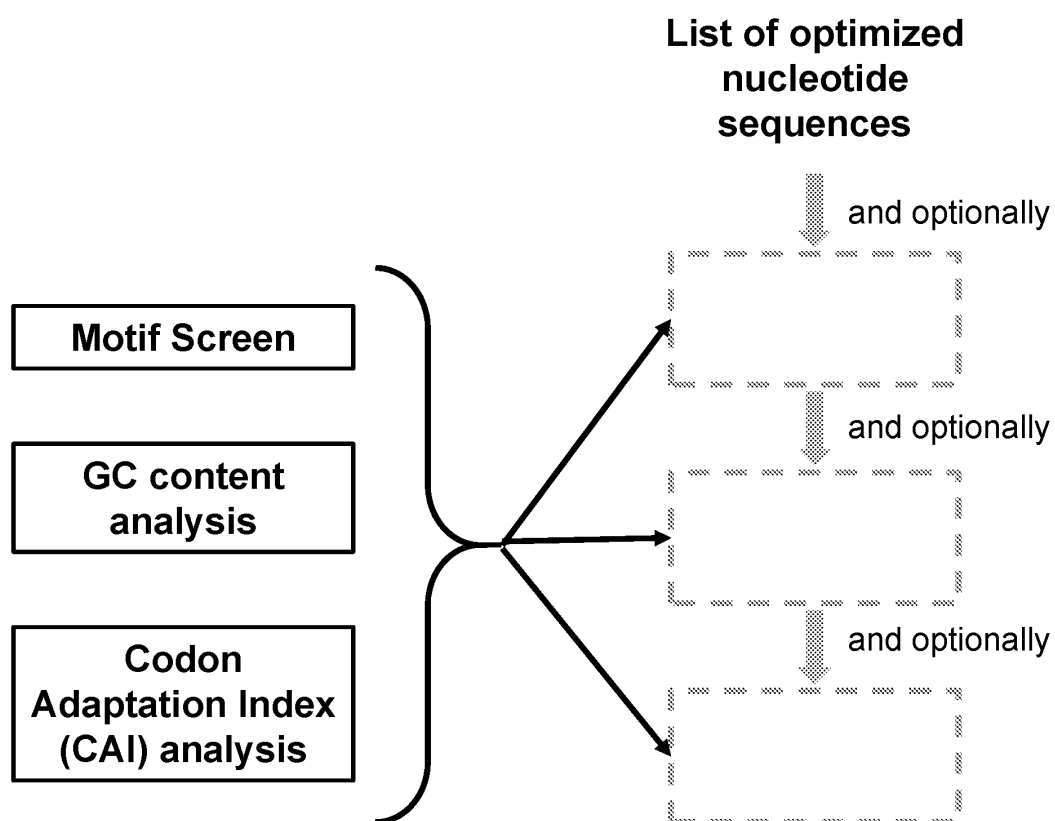
Figure 7

Figure 8

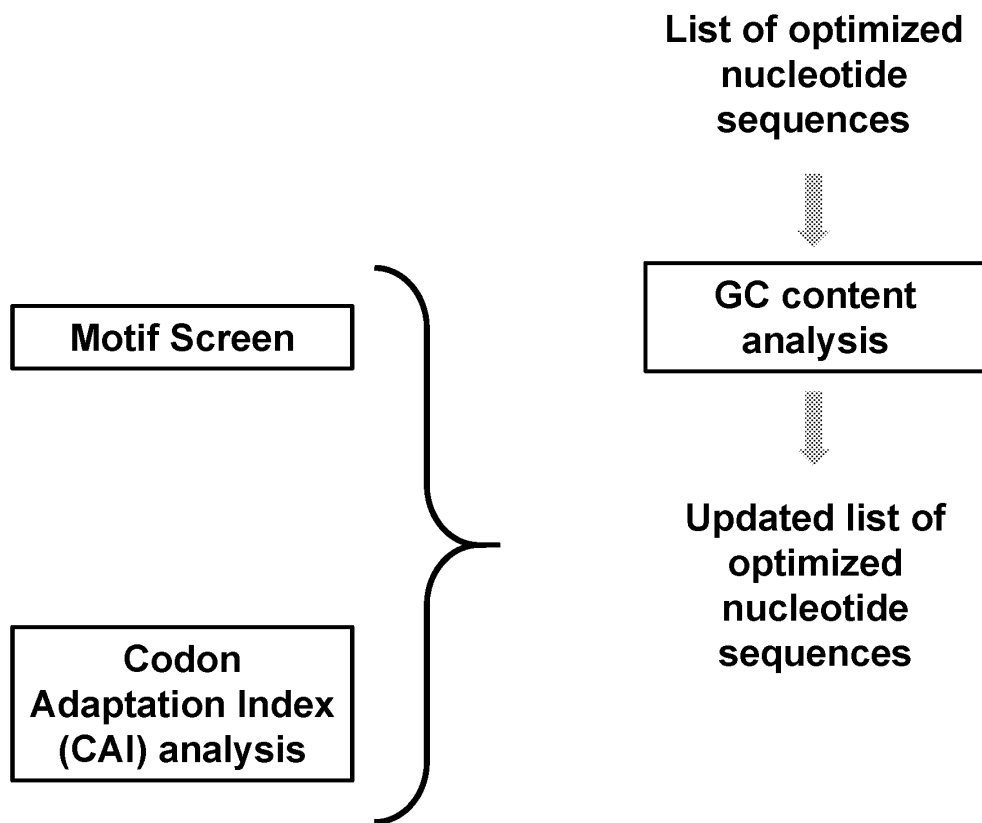


Figure 10

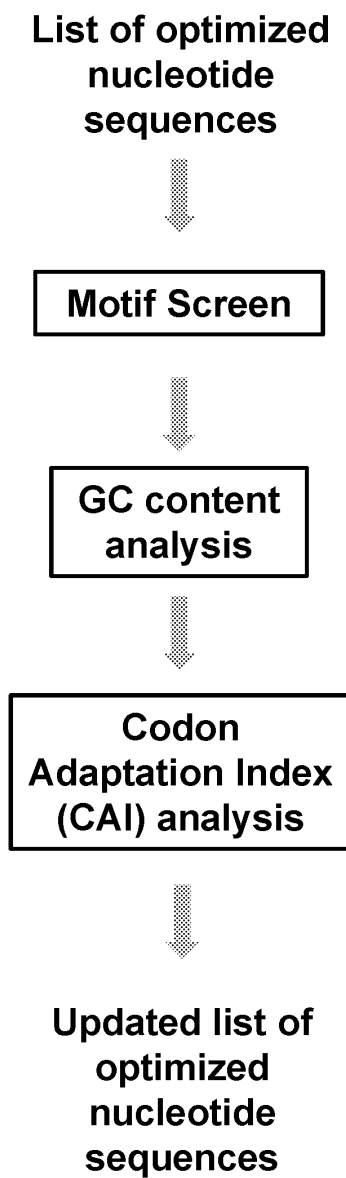


Figure 11

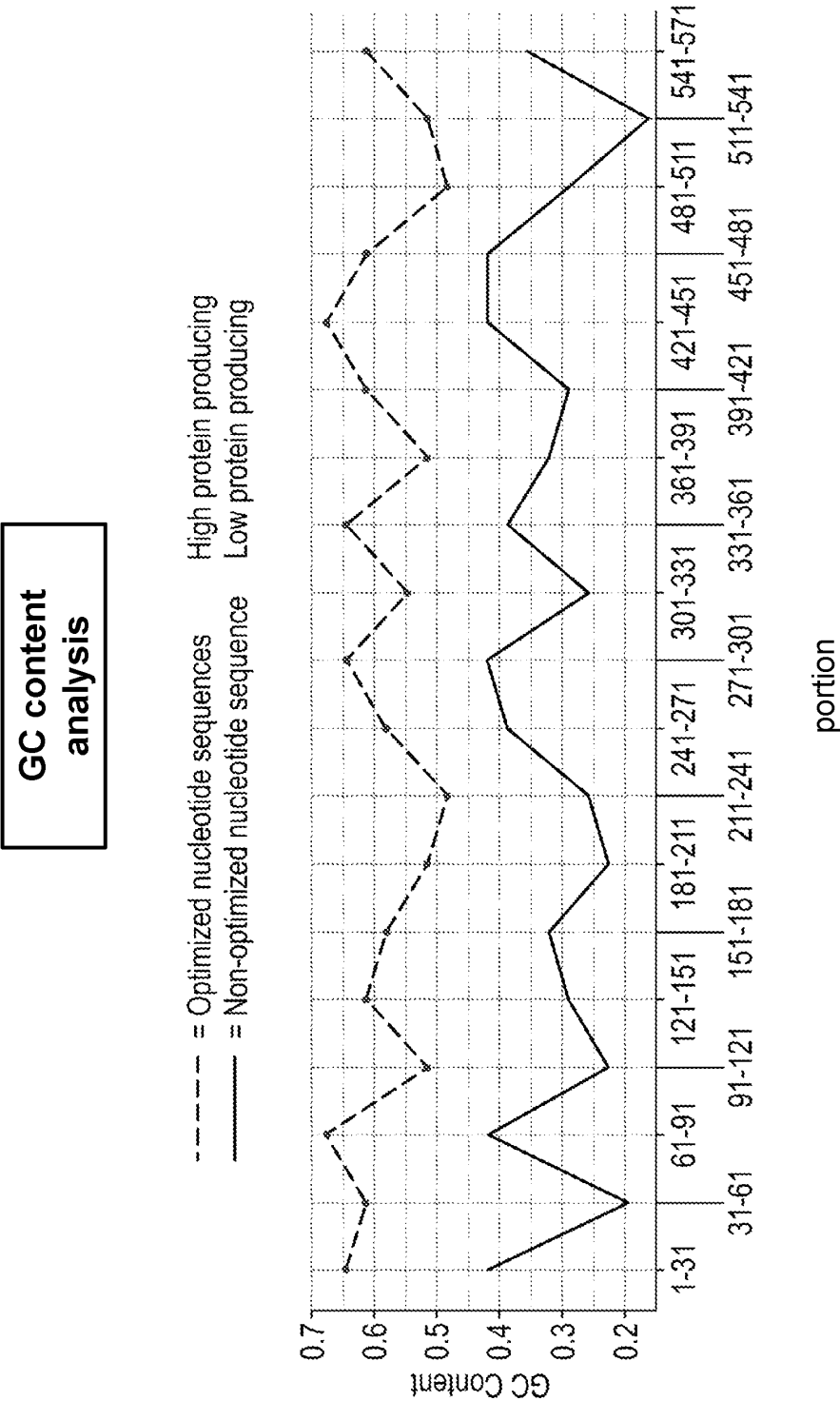


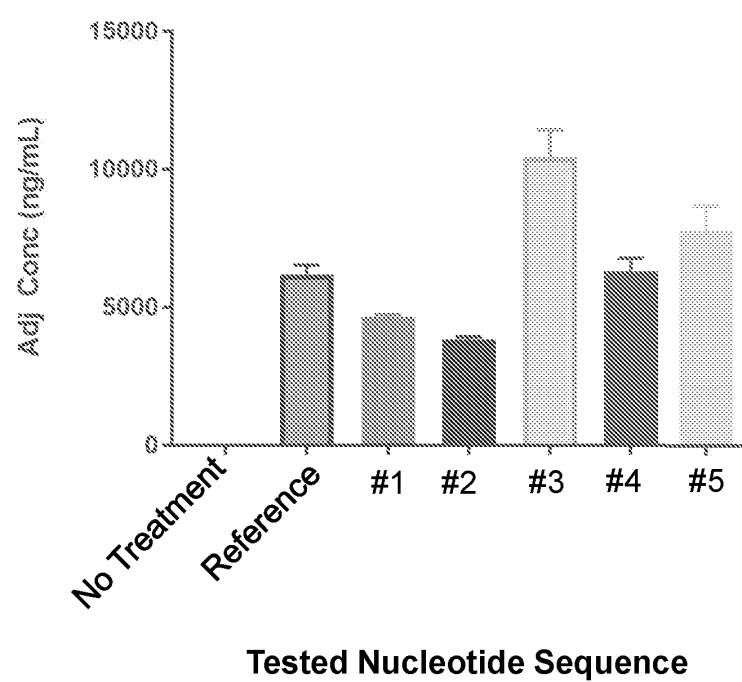
Figure 12

Figure 13A

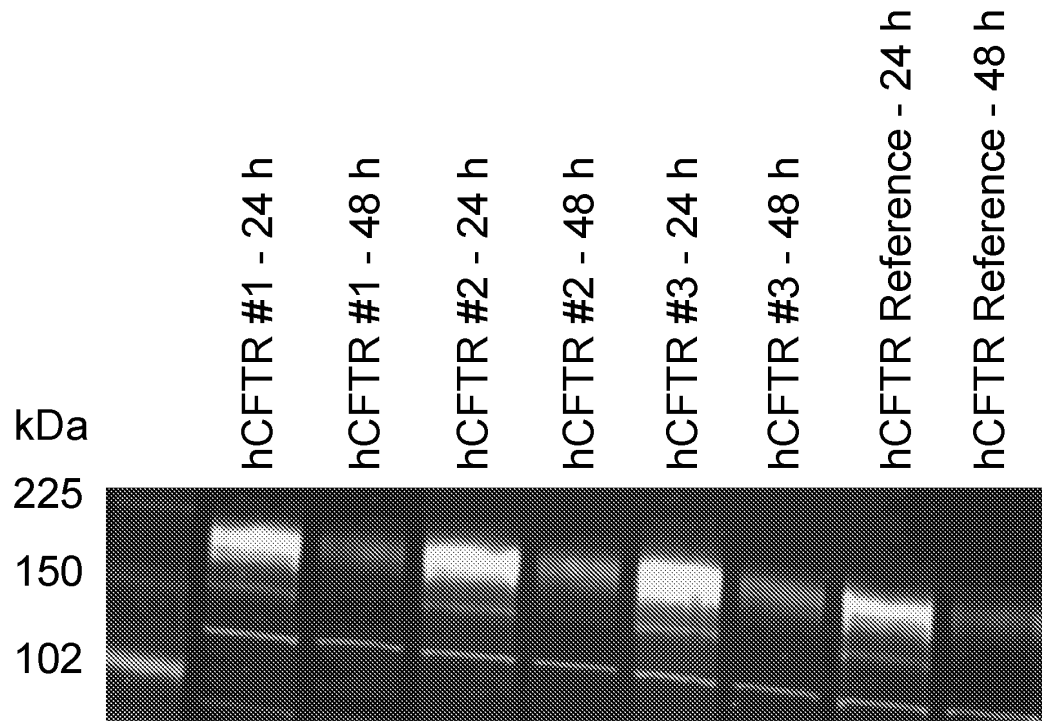


Figure 13B

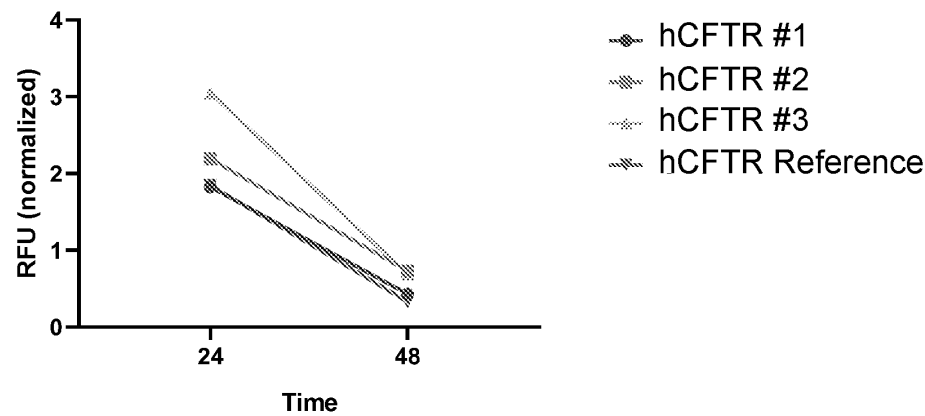


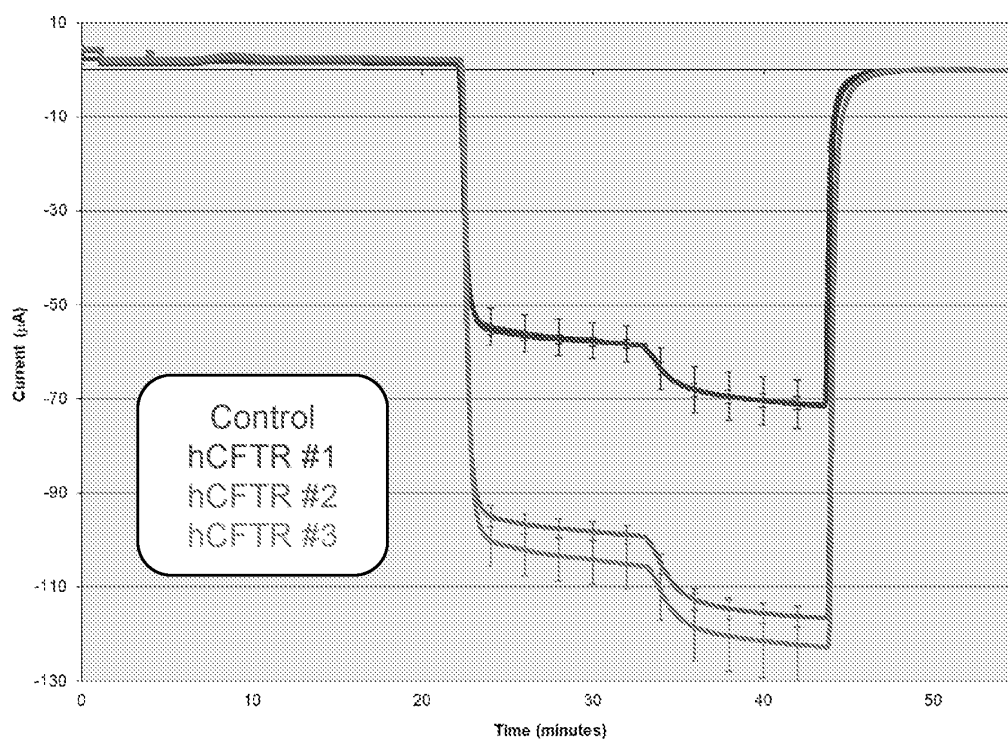
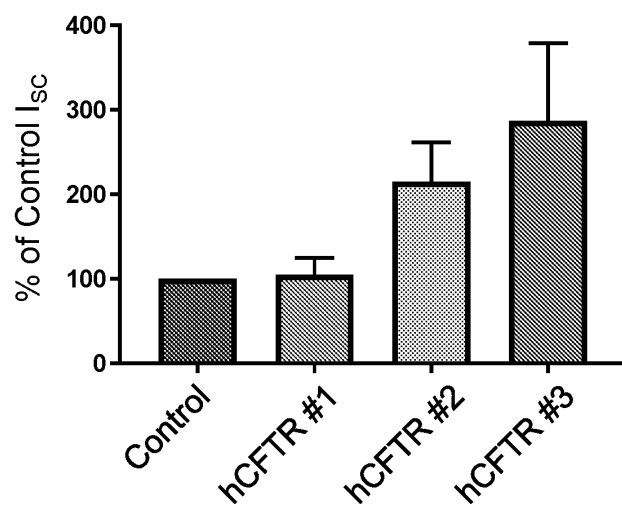
Figure 14A**Figure 14B**

Figure 15A

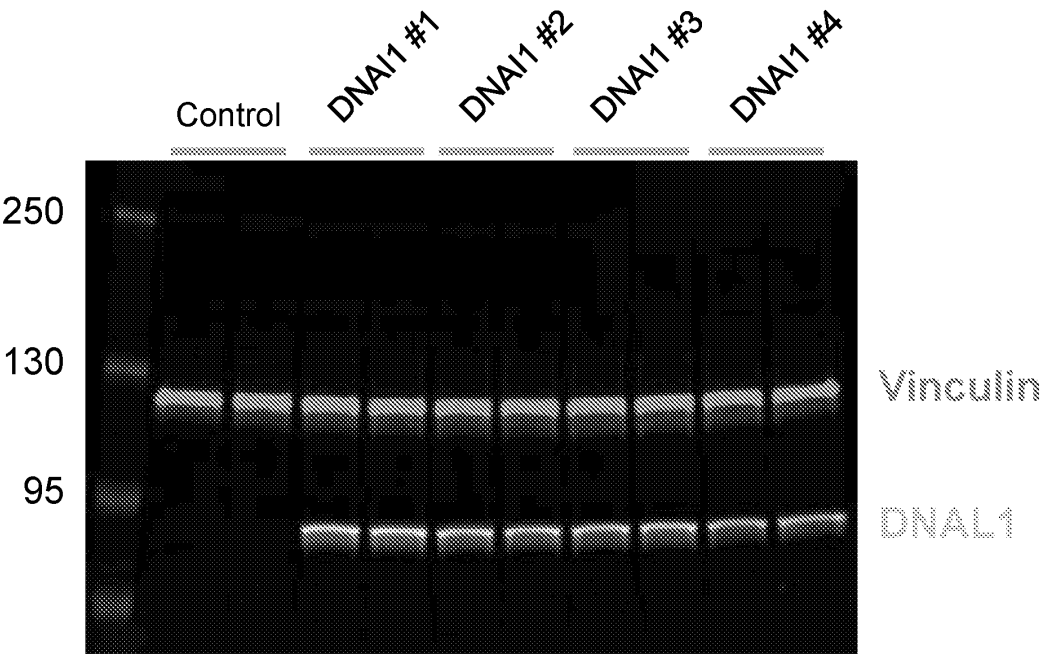


Figure 15B

