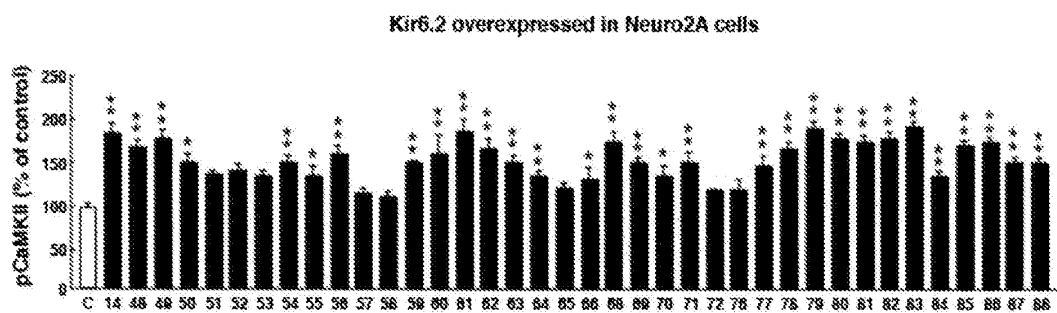
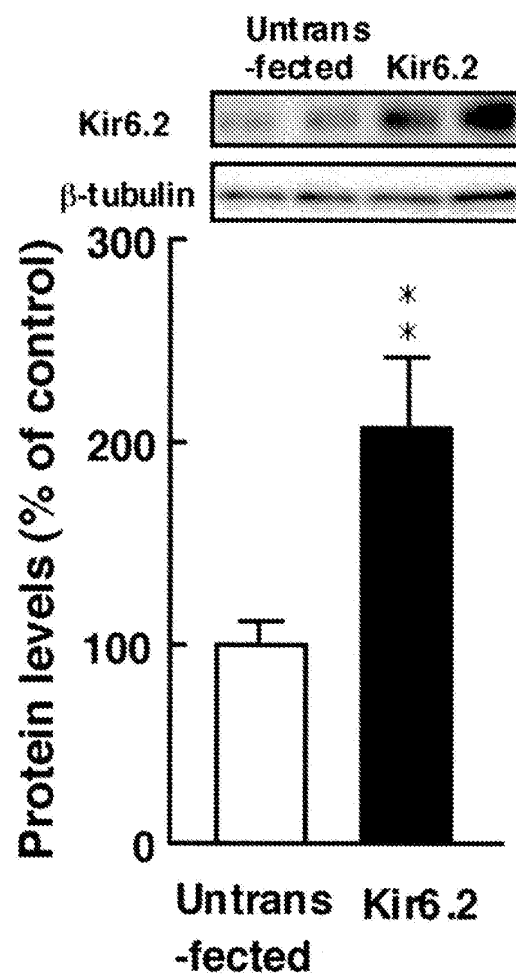


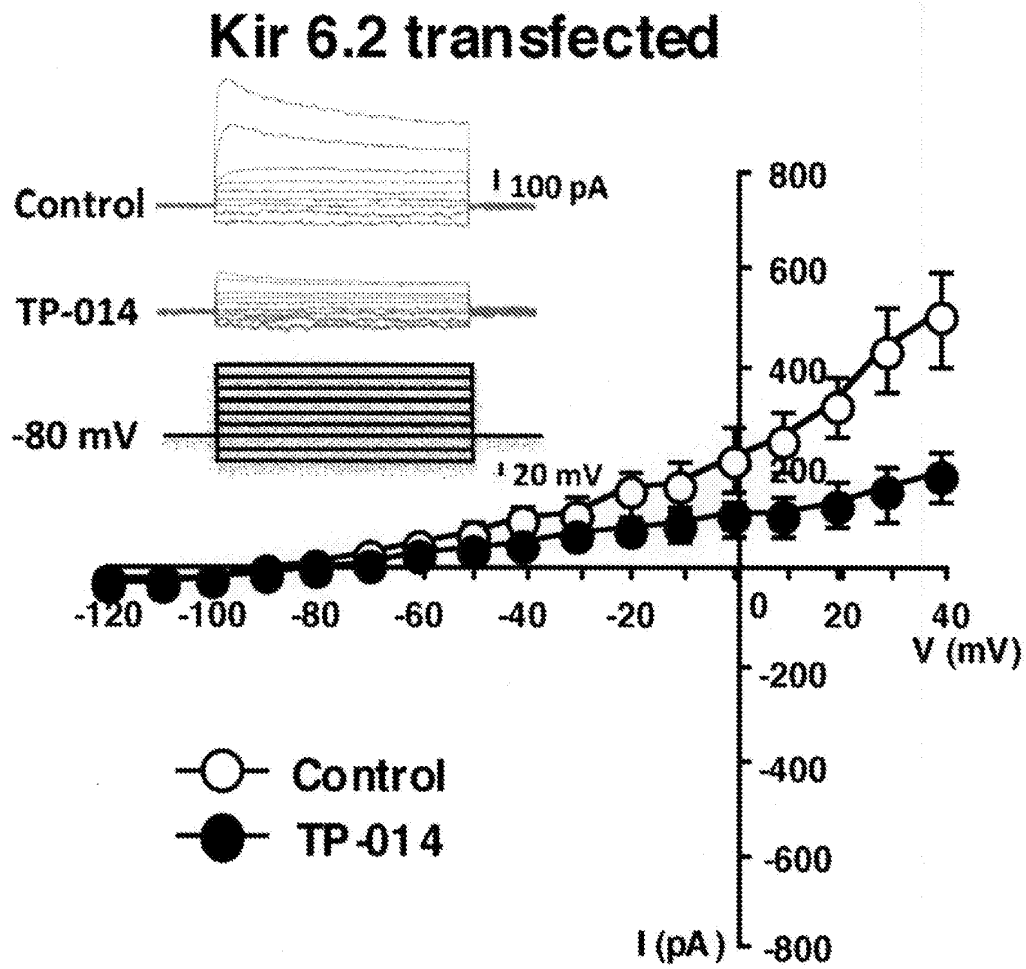
[図1]



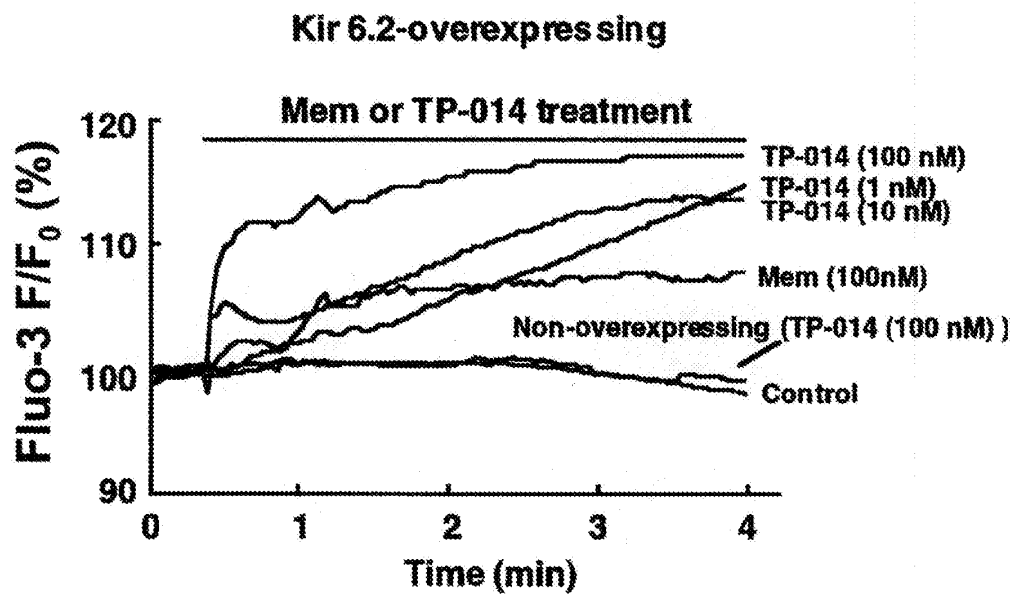
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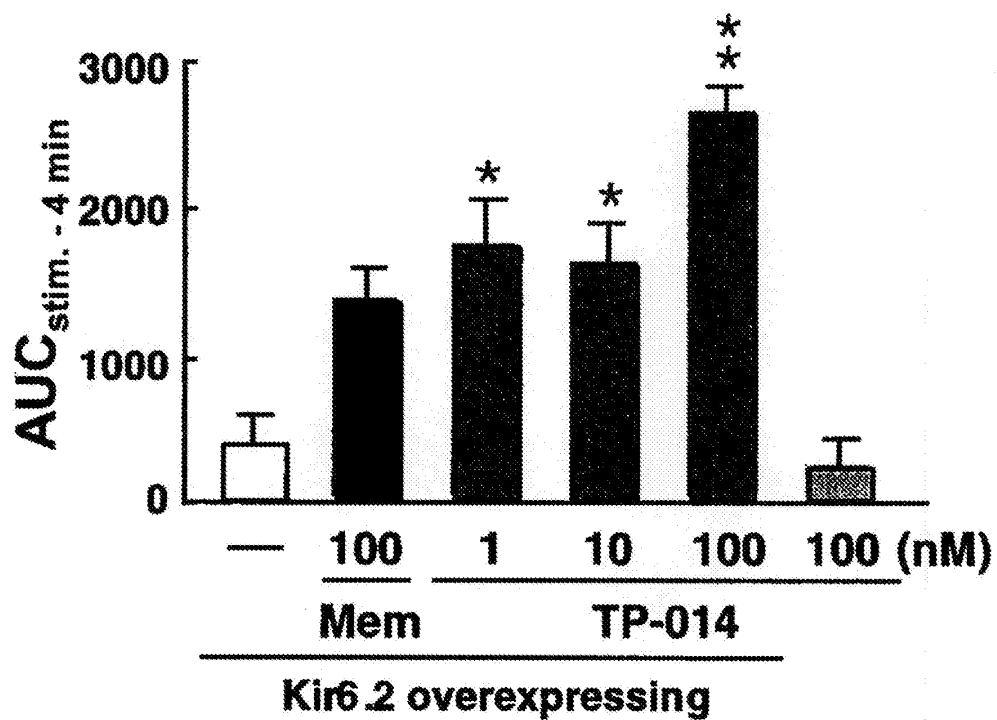
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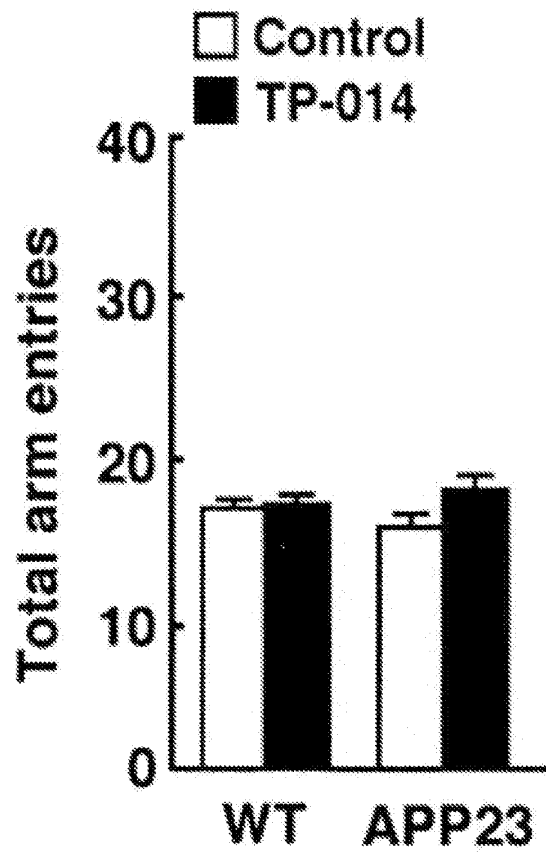
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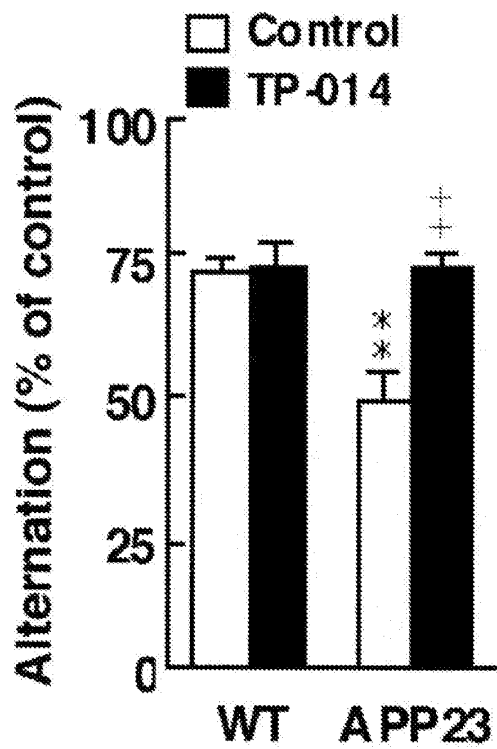
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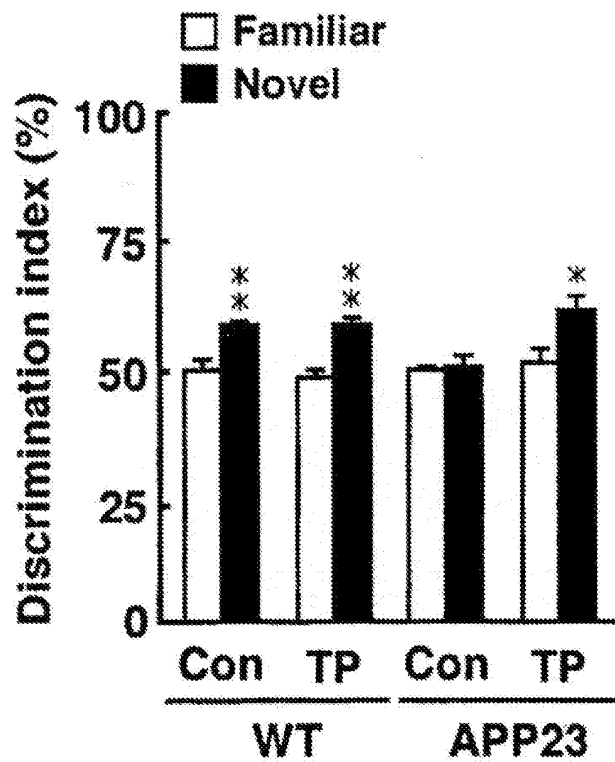
[図4-1]



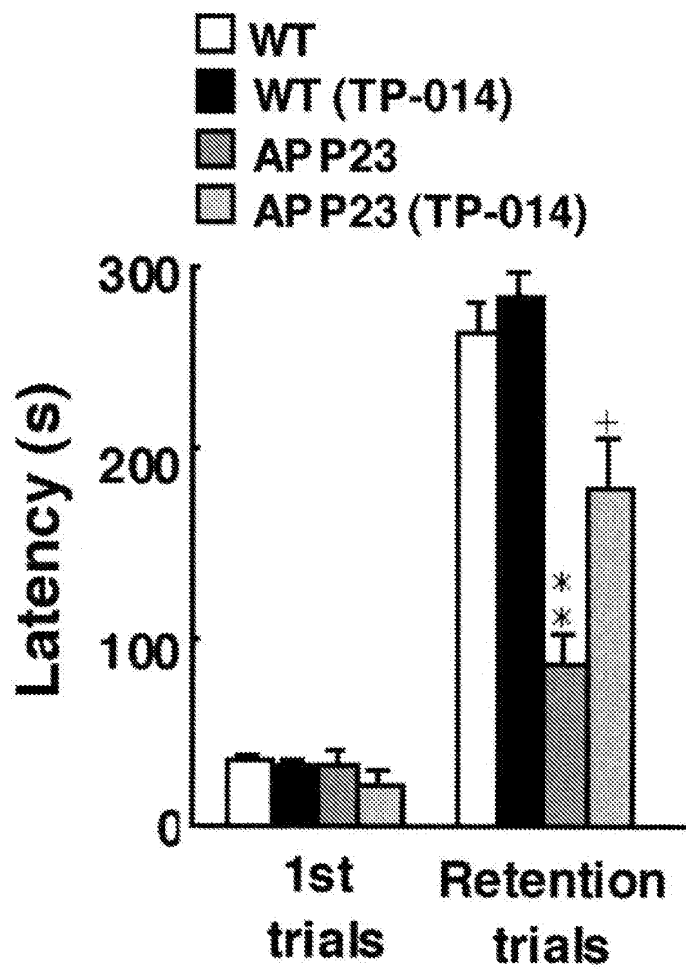
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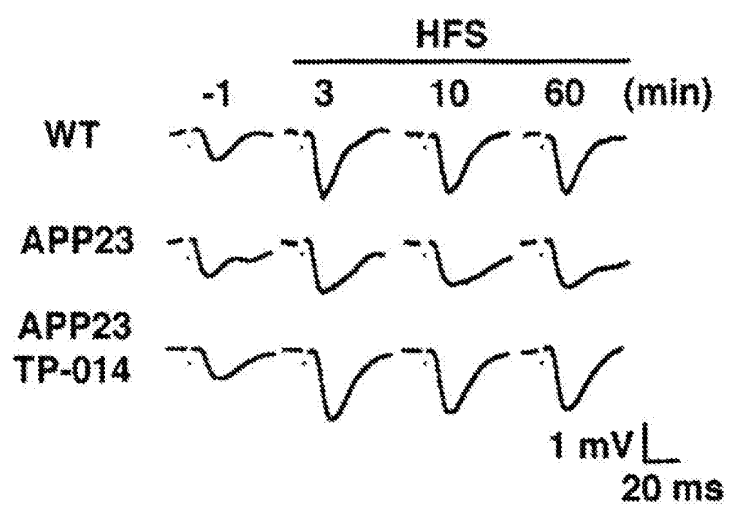
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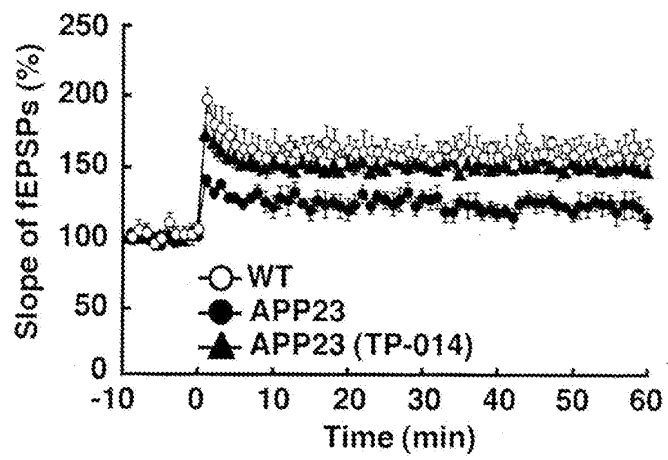
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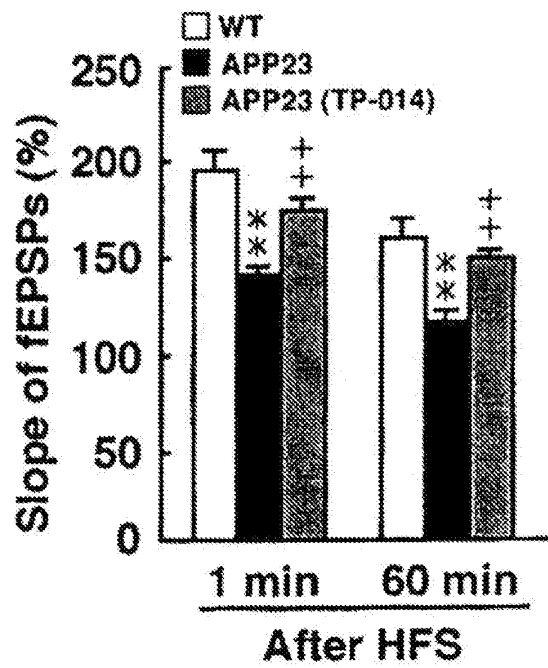
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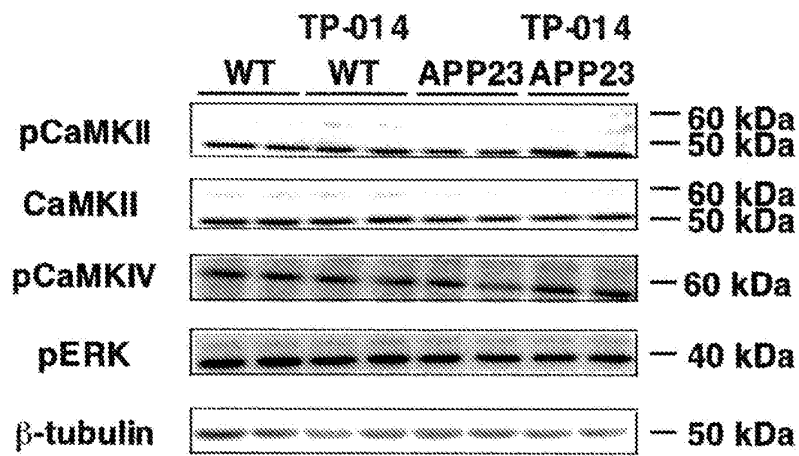
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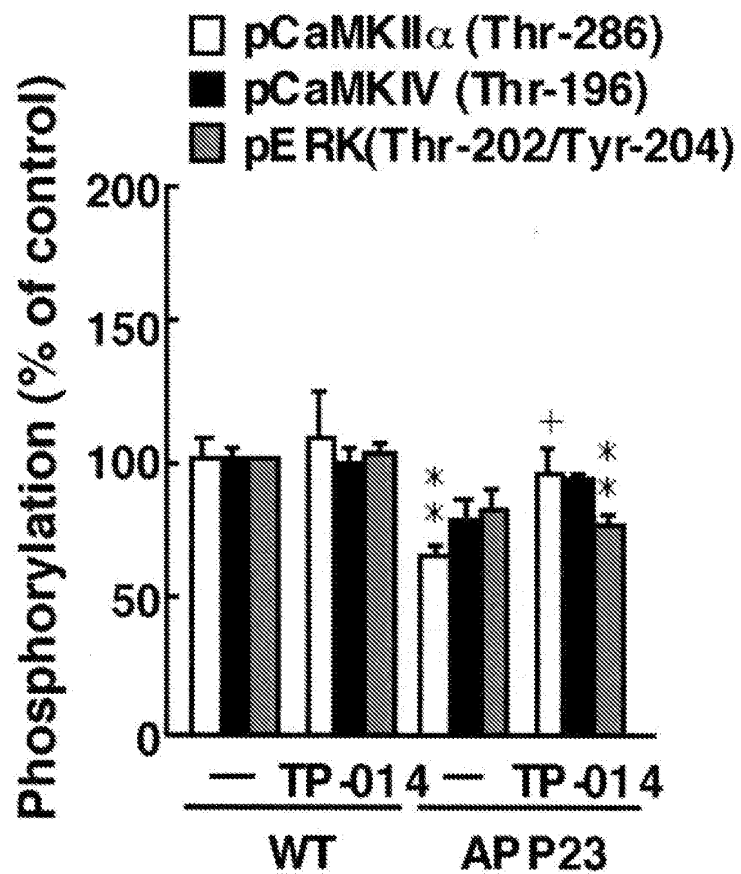
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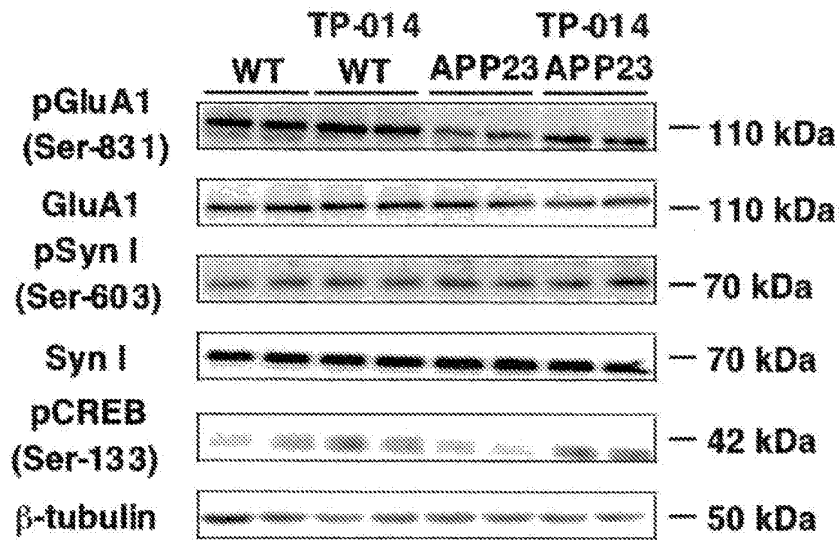
[図5-1]



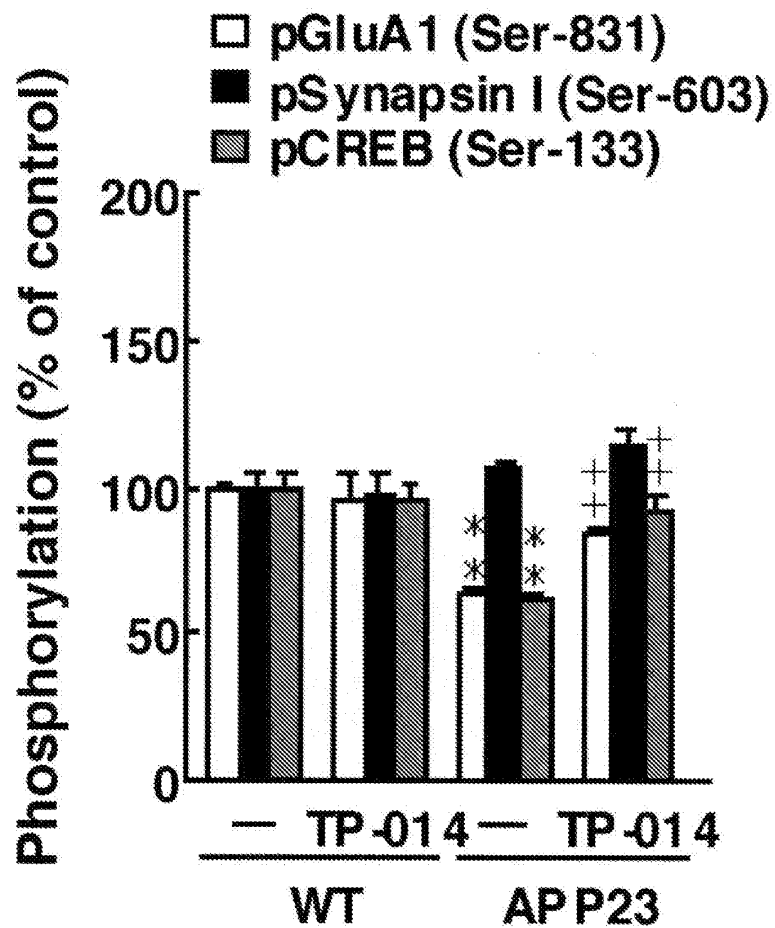
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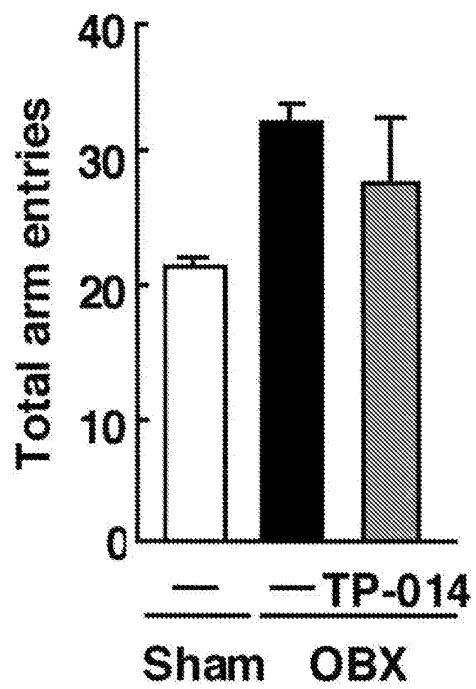
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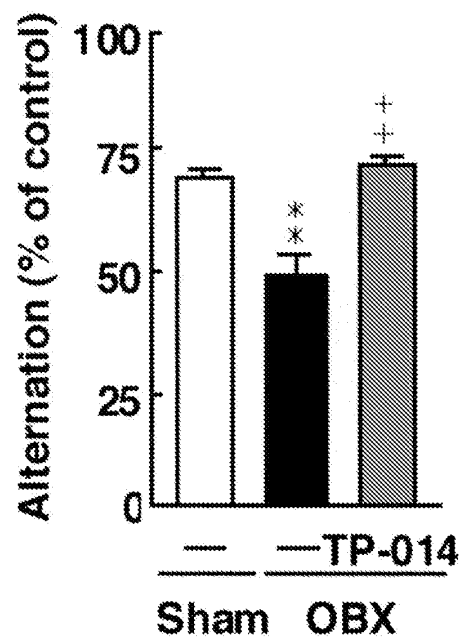
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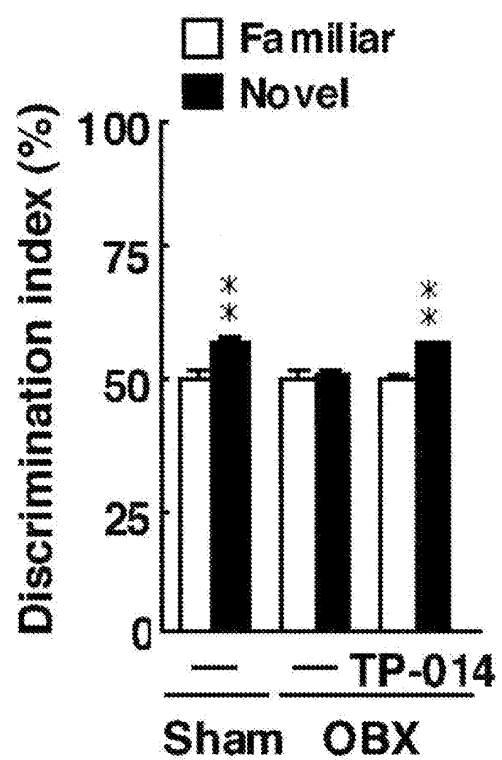
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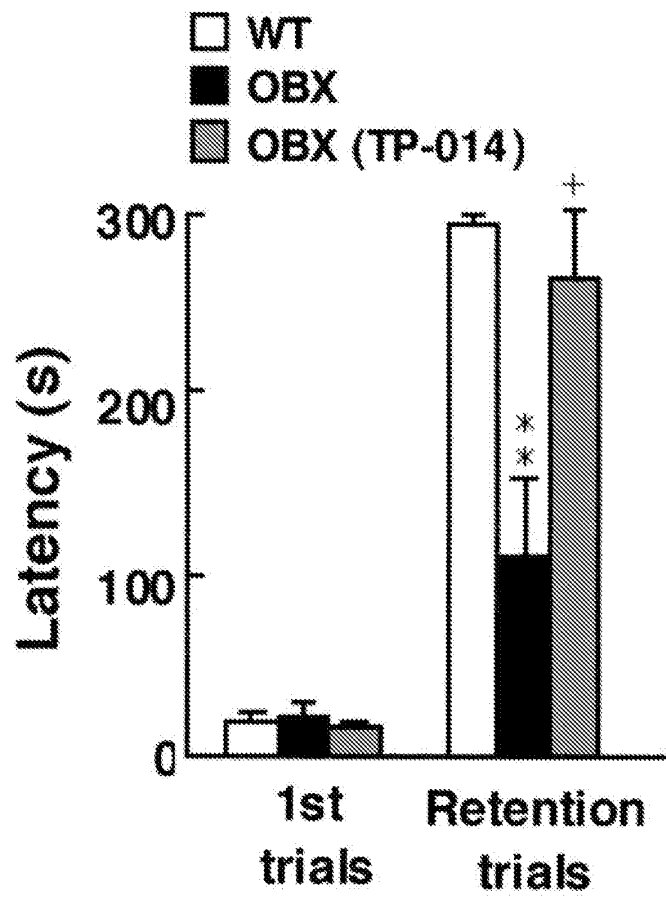
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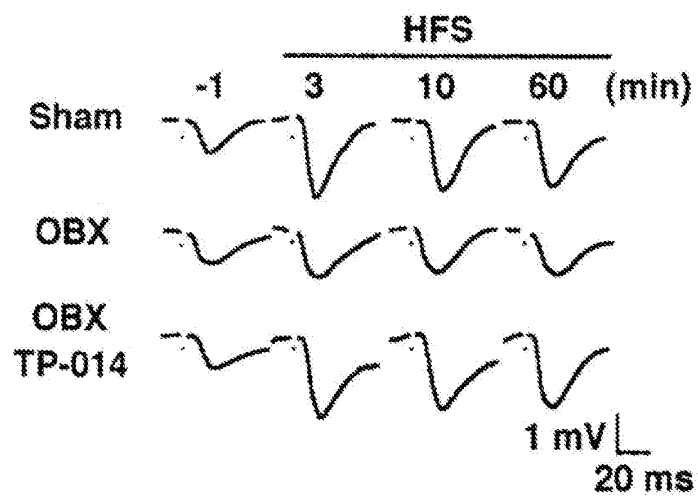
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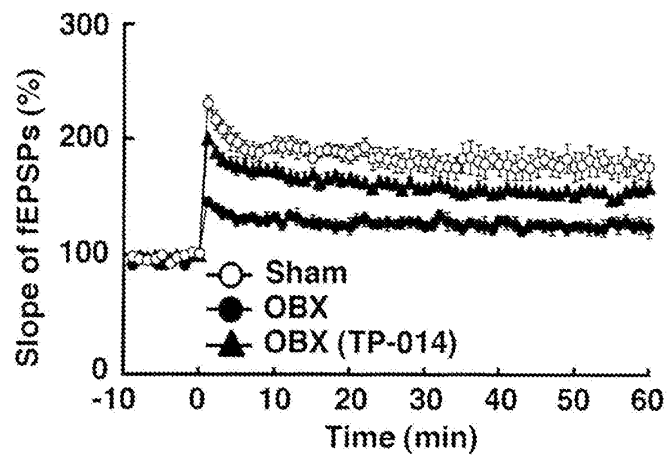
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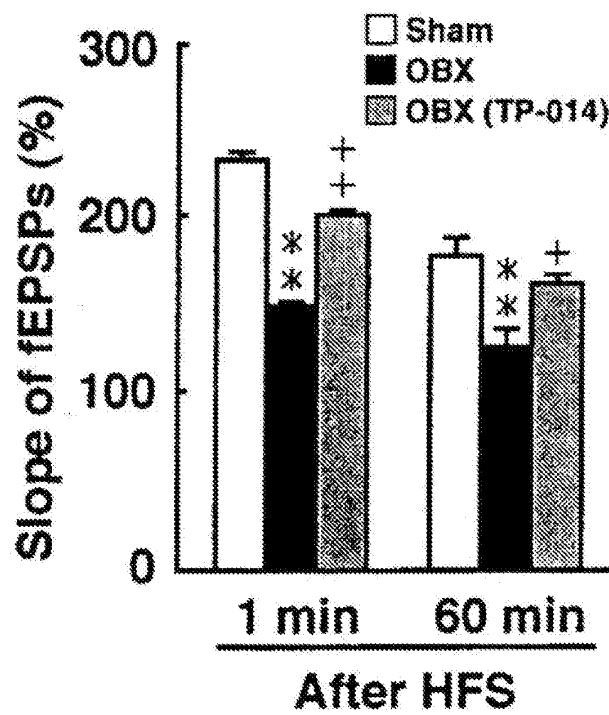
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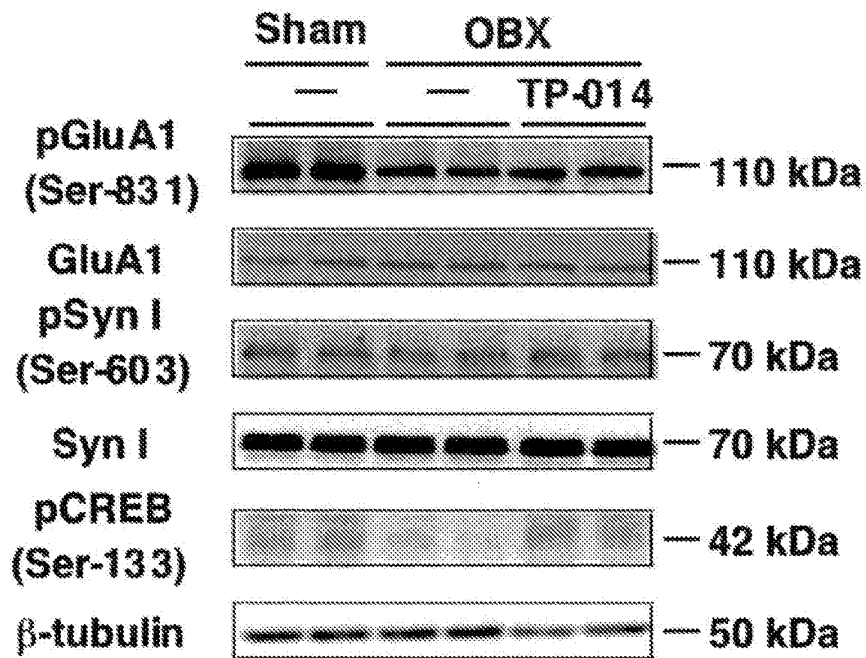
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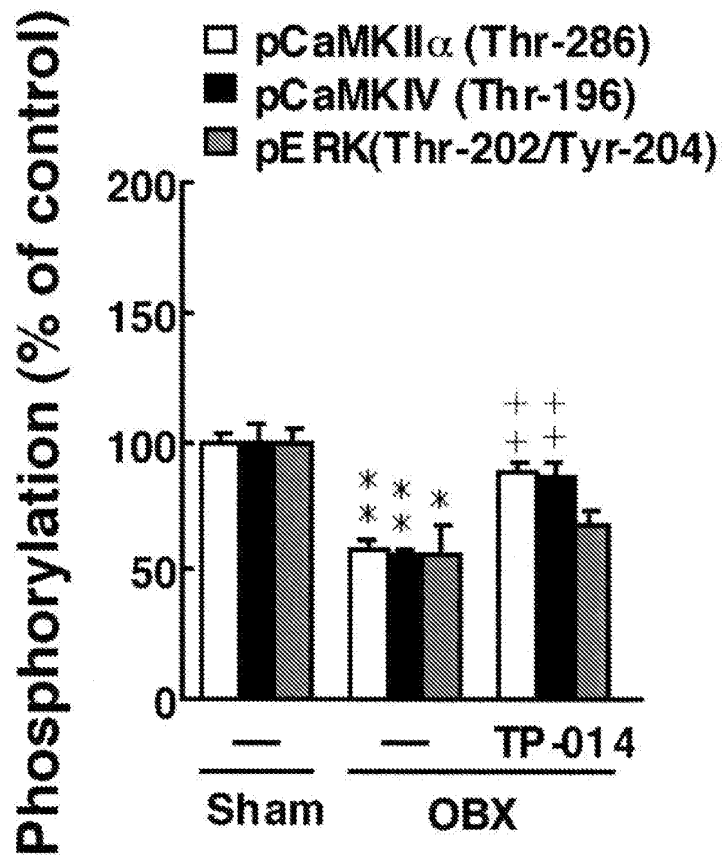
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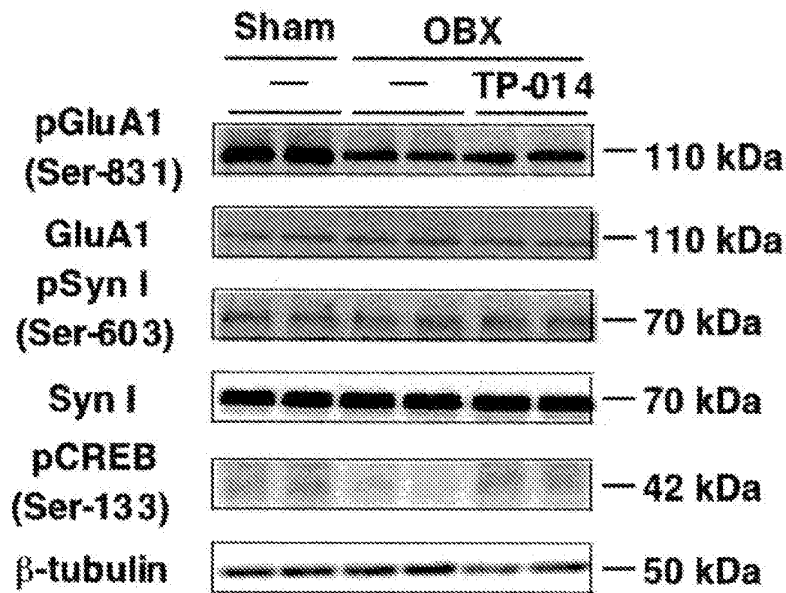
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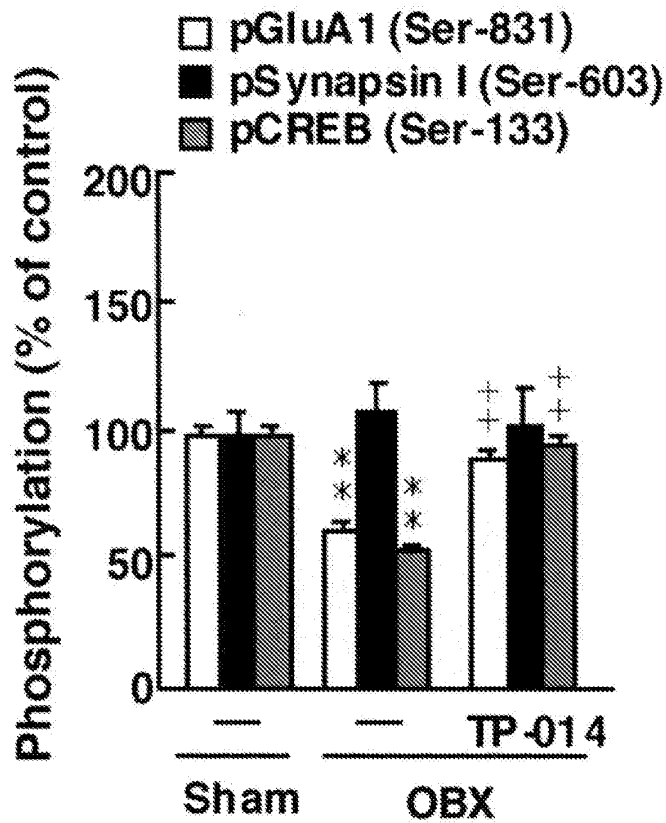
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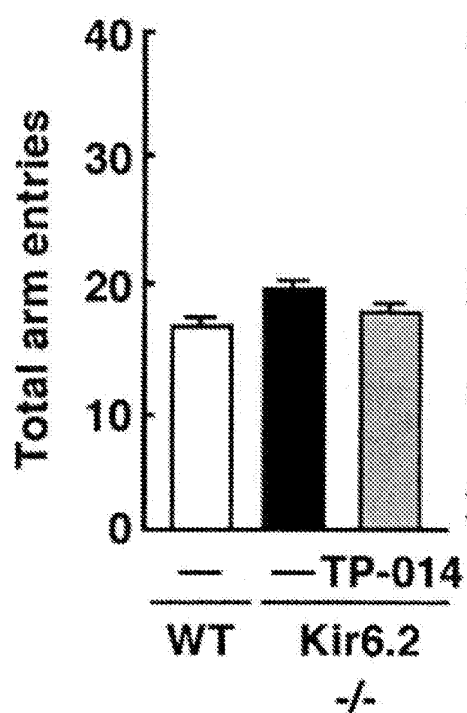
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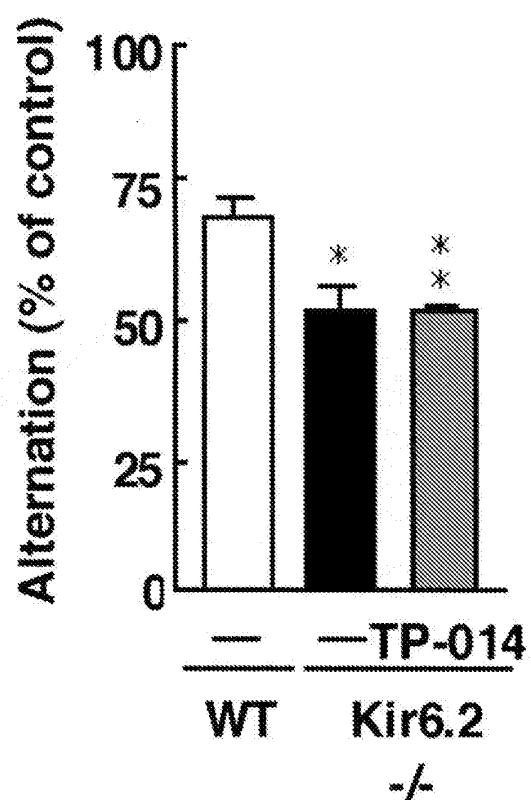
[図7-4]



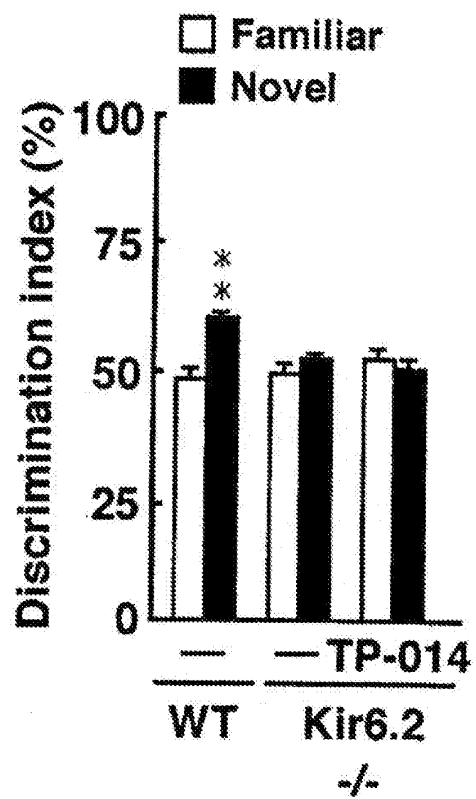
[図8-1]



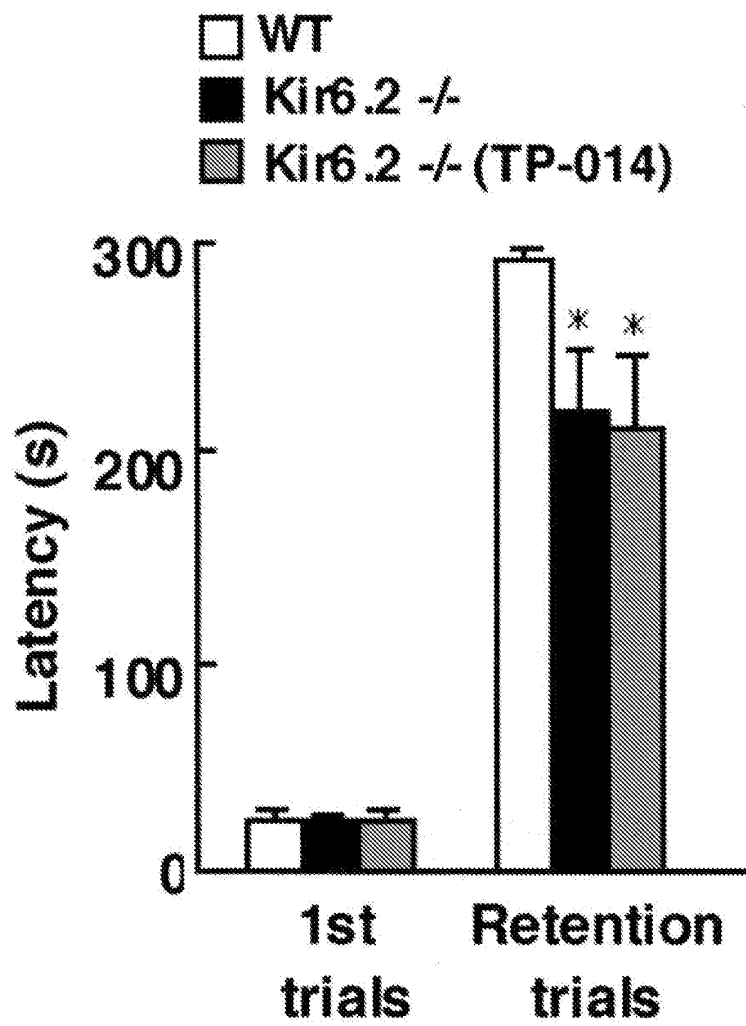
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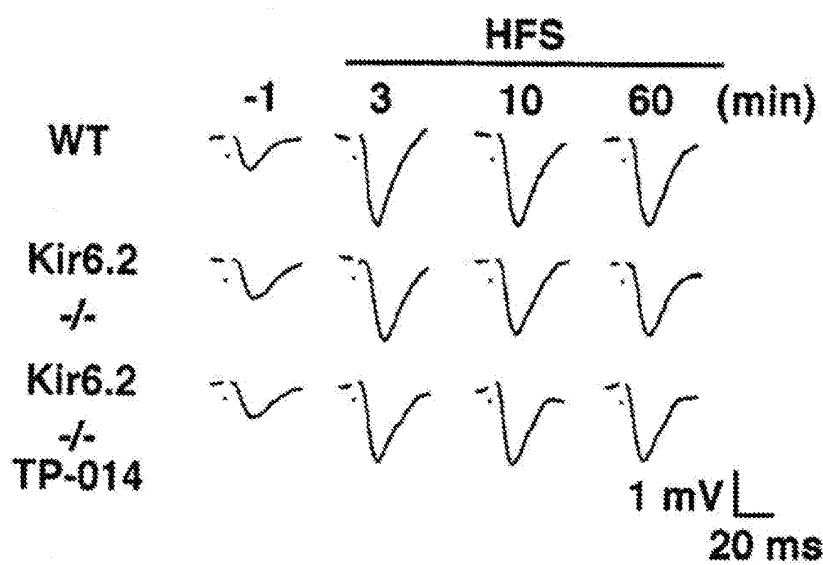
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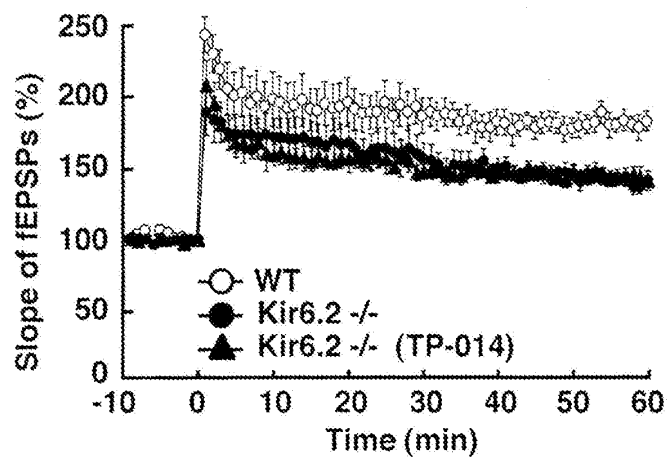
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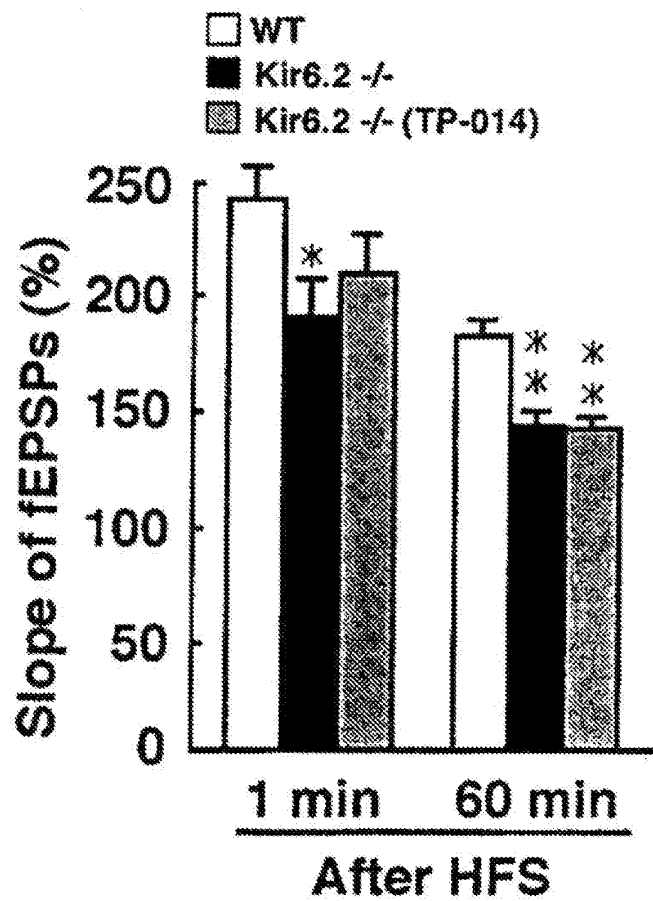
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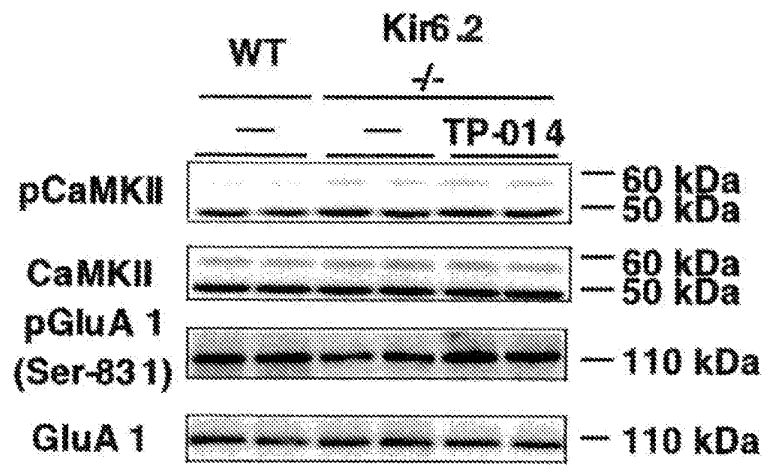
[図8-6]



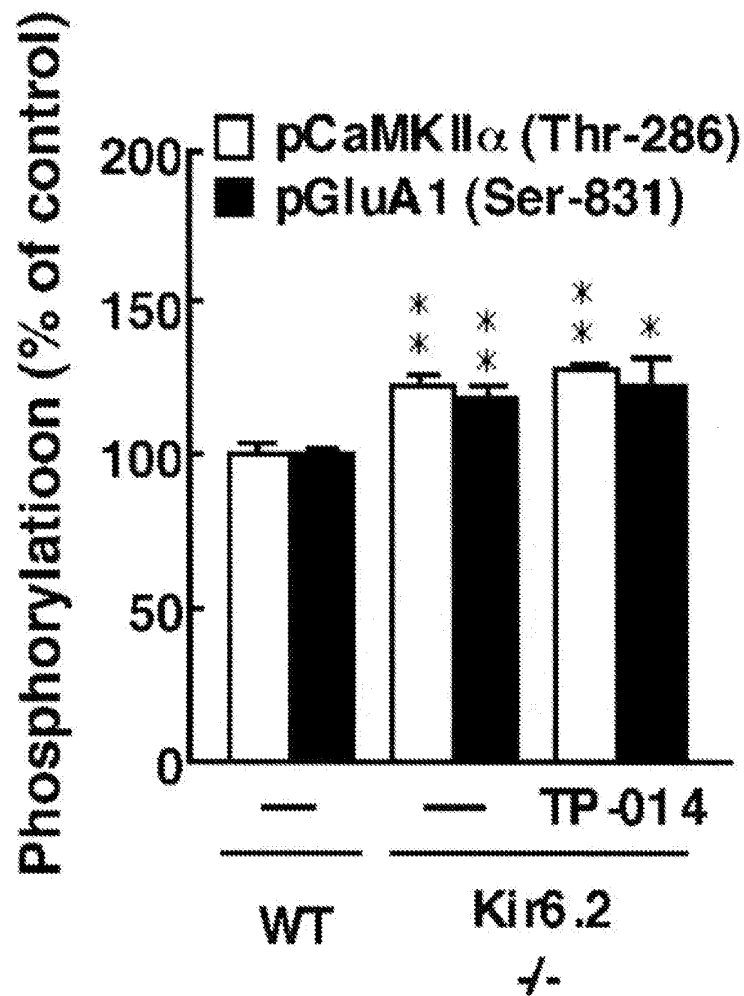
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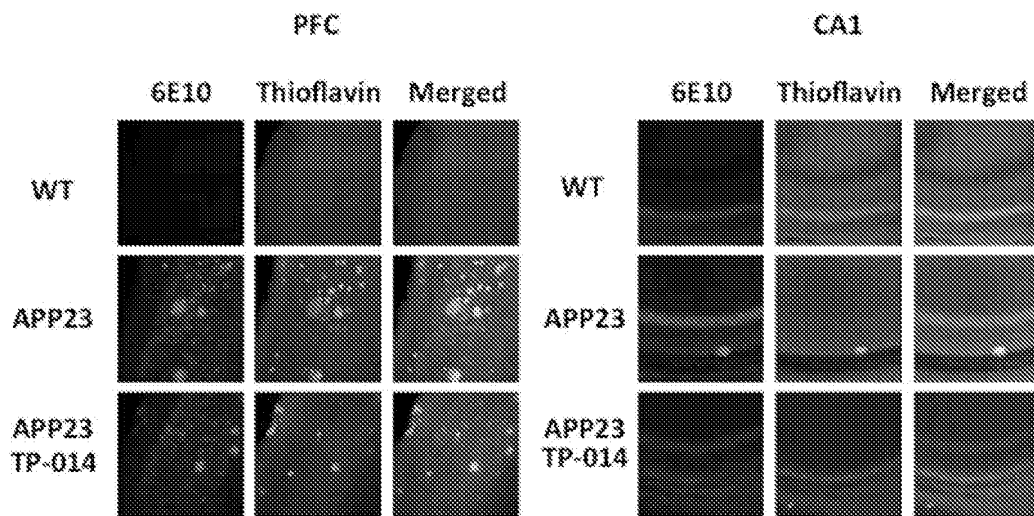
[図9-1]



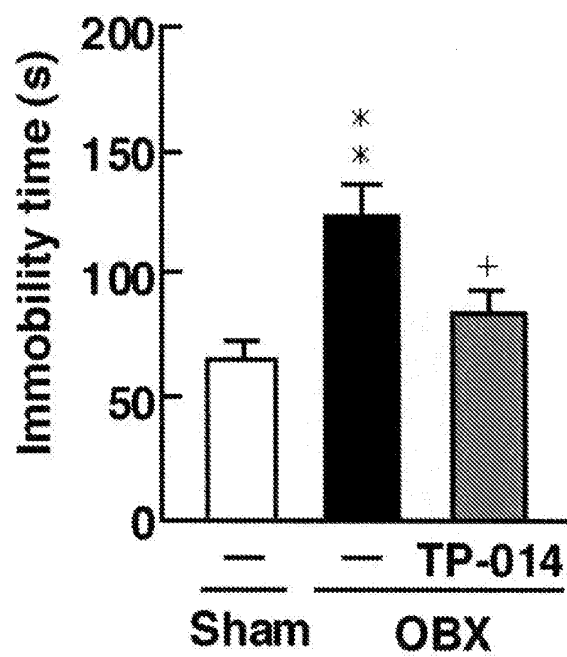
[図9-2]



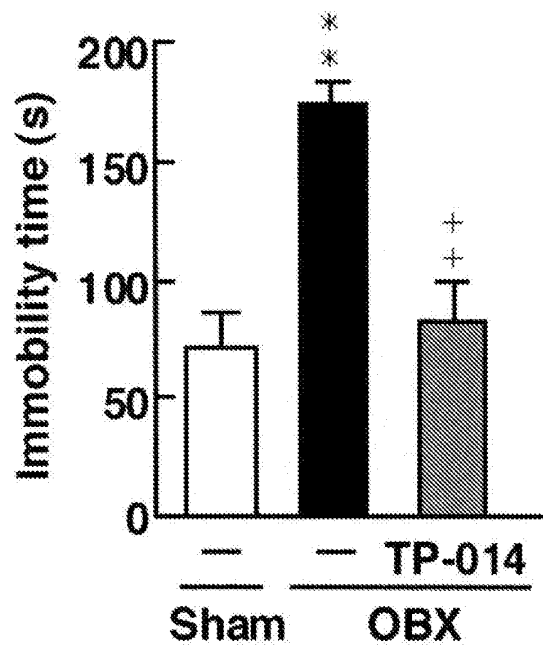
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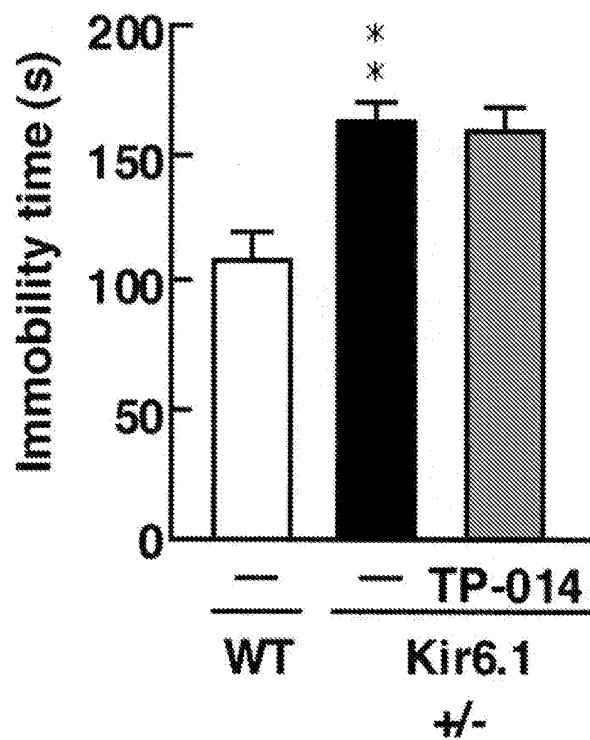
[図11-1]



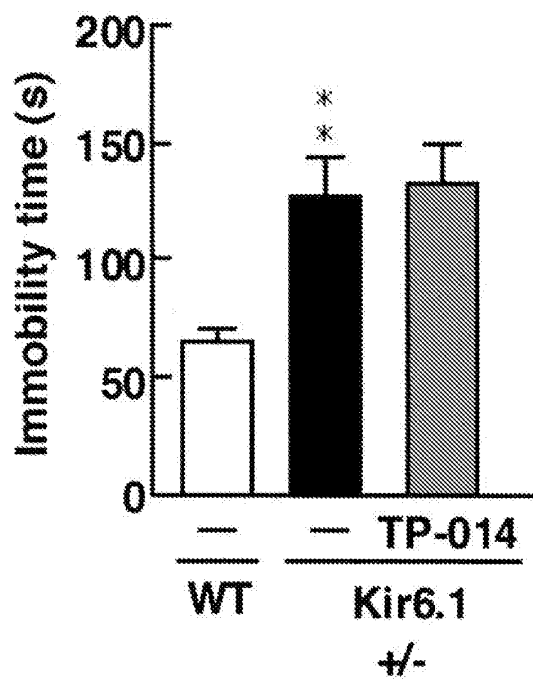
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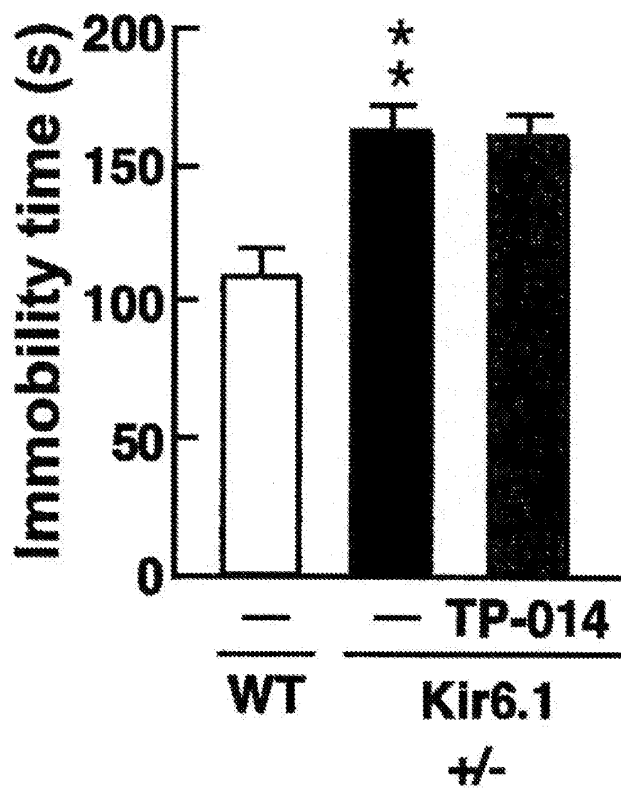
[図12-1]



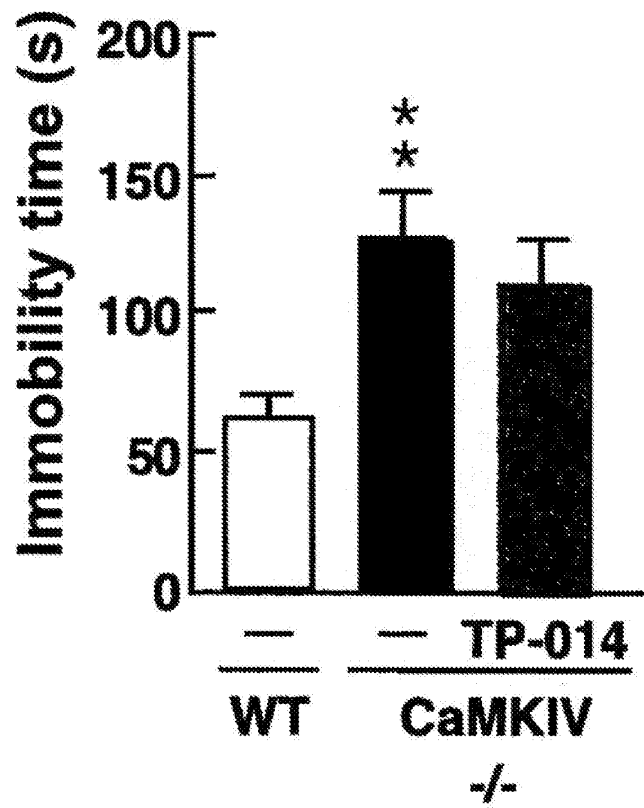
[図12-2]



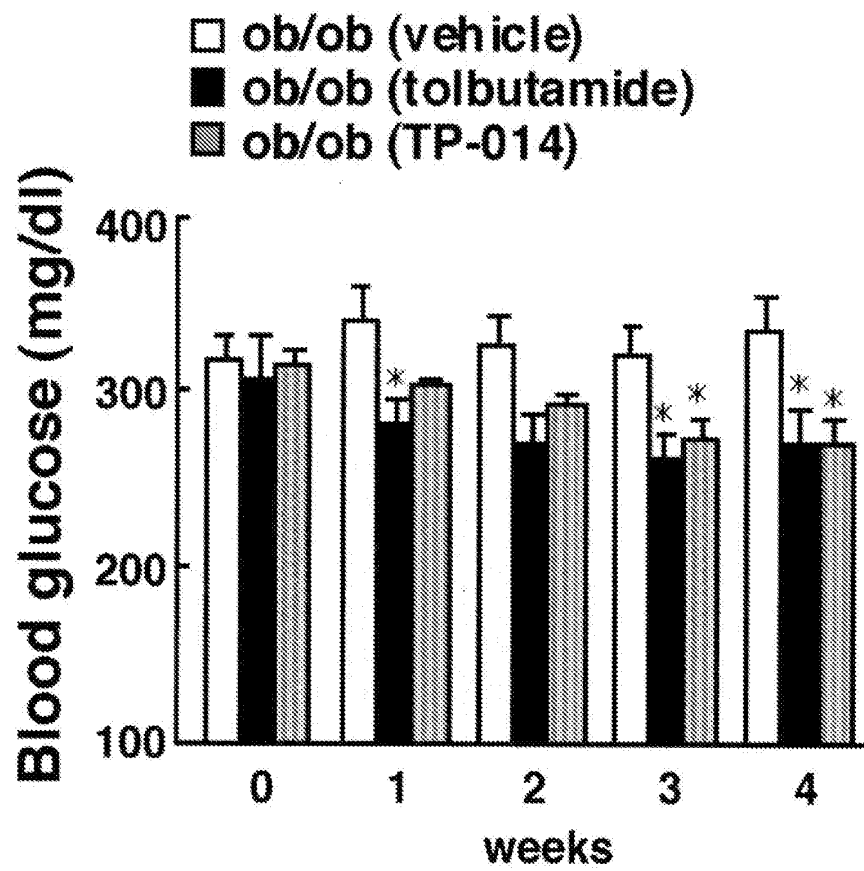
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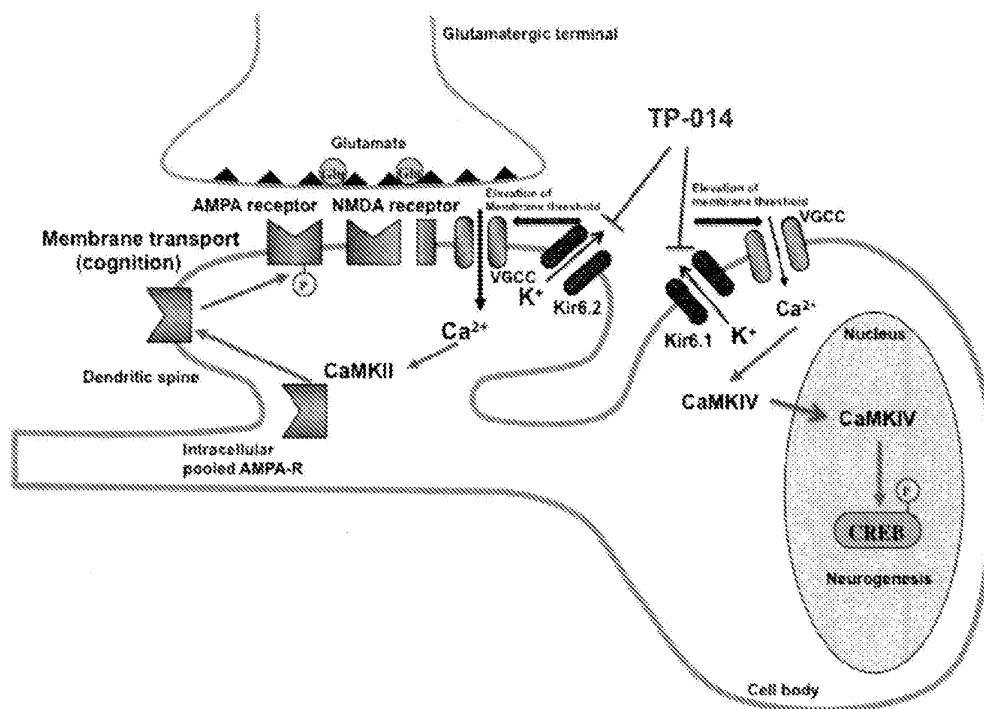
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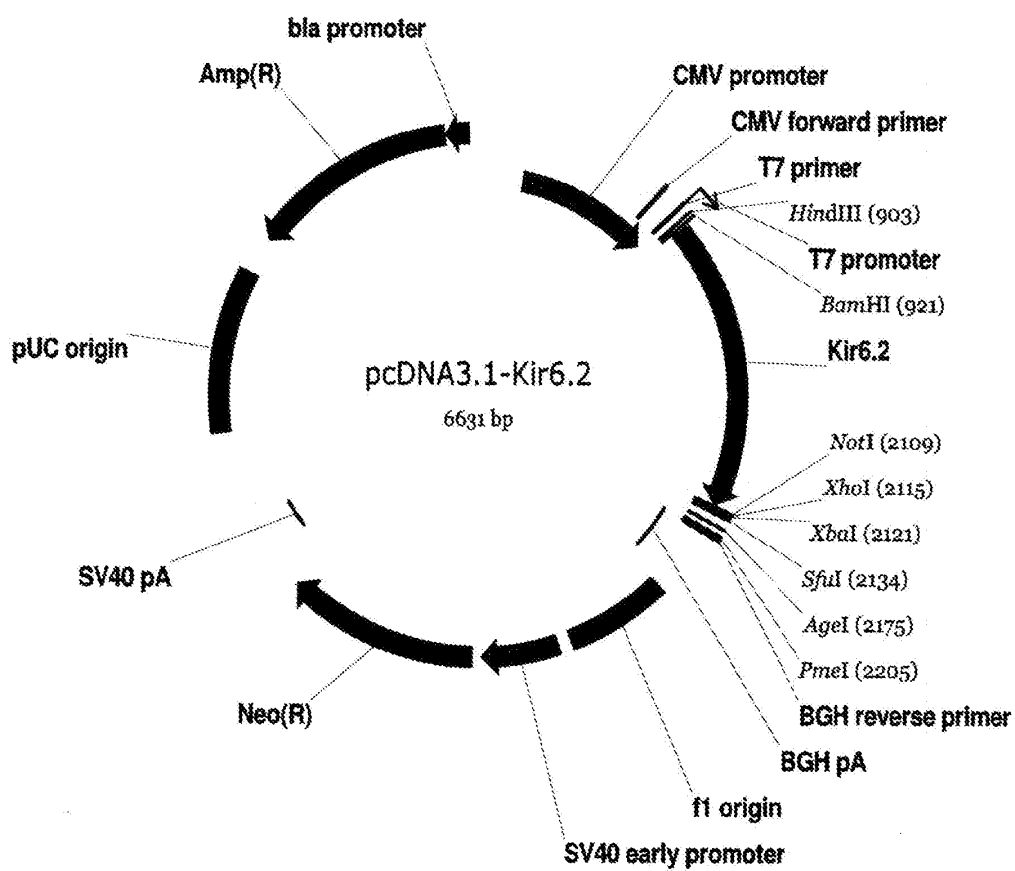
[図14]



[図15]



[図16]



[図17-1]

1	GACGGATCGG GAGATCTCCG GATCCCTAT GGTGCACTCT CAGTACAATC TGCTCTGATG
51	CCGCATAGTT AAGCCAGTAT CTGCTCCCTG CTTGIGTGT GGAGGTGGCT GASTAGTGG
121	CGAGCAAAAT TTAAGCTACA ACAAGGCAAG GCTTGACCGA CAATTCATG AAGAATCTGC
CMV promoter	
181	TTAGGTTAG GCGTTTTCG CTGCTTGGG ATGTACGGG CAGATATAG CGTTGACATT
CMV promoter	
241	GATTATTGAC TAGTIATTA TASTAATCAA TTACGGGGTC ATTAGTTCAT AGCCCATATA
CMV promoter	
301	TGGAGTTCCG CGTTACATAA CTACGGTAA ATGGCCCGCC TGGCTGACCG CCCAAGGACC
CMV promoter	
361	CCCGCCCAAT GACGTCAATA ATGACGTATG TTCCTATAG AACGCCAATA GGGACTTTC
CMV promoter	
421	ATTGACCTCA ATGGGTGGAC TATTTACGGT AAATGCCCCA CTGGCAGTA CATCAAGTGT
CMV promoter	
481	ATCATATGCC AAGTACGGCC CCTATTGACG TCAATGAGG TAAATGGCCG GCCTGSCATT
CMV promoter	
541	ATGCCCASTA CATGACCTTA TGGGACTTTC CTACTTGCCA GTACATCTAC GTATTAGTCA
CMV promoter	
601	TGGCTATTAC CATGGTGATG CGGTTTTCG AGTACATCAA TGGCCGTGGA TAGCGGTTTG
CMV promoter	
661	ACTCACGGGG ATTTCCAAGT CTCCACCCCA TTGACGTCAA TGGGAGTTTG TTTTGGCAGC
CMV forward primer	
CMV promoter	
721	AAATCAACG GGACTTTCGA AAATGTGTA ACAACTCCGC CCCATTGACG CAAATGGGGG
CMV forward prime	
CMV promoter	
781	GTAGGCTGT ACGGTGGGAG GTTATATATA SCAGAGCTCT CTGCTAACT AGAGACCCA
T7 primer	
CMV promoter	
T7 promoter	
841	CTGCTTACTG GCTTATCGAA ATTAATACGA CTCCTATAG GGAGACCCAA GCTGGTAGT
+2	HindIII BamHI KIR6.2 M L S R K G I I P E
901	TAAGCTTGT ACCGAGCTCG GATCCGCCAC CATGCTGTCC SGAAAGGGEA TTATCCCTGA
KIR6.2	
+2	E E Y V L T R L A E D P T E P R Y R T R E
961	GGAAATATGT CTGACCCGCG TGCCAGAGGA CCTACAGAG CCAGGTACC GTACTGGGA
KIR6.2	
+2	E R R A R F V S K K G N C N V A H K N I R
1021	GAGGAGGGCC CGCTTCGTGT CCAAGAAAGG CAACTGCAAC GTGCCACACA AGAACATCCG
KIR6.2	
+2	R E Q G R F L Q D V F T T L V D L K W P H
1081	AGAGCAGGCG CGCTTCCTGC AAGATGTGTT CACCACGCTG GTGGACCTCA AGTGGCCCA
KIR6.2	
+2	H T L L I F T M S F L C S W L L F A M V W
1141	CACGCTGCTC ATTTTCACCA TGTCTTCTCT GTGCAGCTGG CTGCTCTTCG CCATGGTCTG
KIR6.2	
+2	W W L I A F A H G D L A P G E G T N V P C
1201	GTGGGTCAAC GCCTTTGCCC ACGGTGACTT GSCCCCGGA GAGGGACCA ATGTGCTCTG

+2 C V T S I H S F S S A F L F S I E V Q V T
 1261 CGTCACAAGC ATCCACTCCT TTTCGCTGCG CTCCTTTTC TCCATCGAGG TCCAGGTGAC
 Kir6.2
 +2 T I G F G G R M V T E E C P L A I L I L I
 1321 CATTGGTTTC GCGGGGCGCA TGGTGACAGA GGAATGTCC CTGGGCAATC TTATTCTGAT
 Kir6.2
 +2 I V Q N I V G L M I N A I M L G C I F M K
 1381 CGTGCAGAAT ATCGTAGGCG TAATGATCAA CGCATCATG CTGGGCTGCA TCTTCATGAA
 Kir6.2
 +2 K T A Q A H R R A E T L I F S K H A V I T
 1441 AACGSCACAG GCCCATCGGC GGGCAGAAAC CCTCATCTTC AGAAGCATG CCGTGATCAC
 Kir6.2
 +2 T L R H G R L C F M L R V G D L R K S M I
 1501 CCTGCGACAT GGGCGCTGT GTTTCATGCT TCGGTAGGG GACCTCGAA AAAGCATGAT
 Kir6.2
 +2 I I S A T I H M Q V V R K T T S P E G E V
 1561 CATTAGCGCC ACCATTCTA TCGAGGTGGT GCGCAAGACC ACCAGCCCG AGGGCGAGGT
 Kir6.2
 +2 V V P L H Q V D I P M E N G V G G N S I F
 1621 TGTGCTCTC CACCAAGTGG ACATCCCAT GGAGAAGCT GTGGGTGTA ACAGCATCTT
 Kir6.2
 +2 F L V A P L I I Y H V I D S N S P L Y D L
 1681 TGTGTGGCC CCACTCATCA TCTACCAGT CATCGATCC AACAGCCCG TCTACGCTT
 Kir6.2
 +2 L A P S D L H H H Q D L E I I V I L E G V
 1741 GGCTCTTAT GACCTGCACC ACCACCAGG CTTGGAGATC ATTGTCTCT TGGAGGTGT
 Kir6.2
 +2 V V E T T G I T T Q A R T S Y L A D E I L
 1801 GGTAGAAACC ACAGGCATTA CCACCCAGGC CCGCACTCC TATCTGGTG ACGAGATTCT
 Kir6.2
 +2 L W G Q R F V P I V A E E D G R Y S V D Y
 1851 GTGGGGGCG CGTTTGTTC CCATCGTGGC CGAGGAGGAT GSCCGCTATT CTGTGGASTA
 Kir6.2
 +2 Y S K F G N T V K V P T P L C T A R D L D
 1921 CTCCAAATTC GGAACACCG TTAAAGTGG CACACCACTC TGCACAGCC GCGAGCTTGA
 Kir6.2
 +2 D E D R S L L D A L T L A S S R G P L R K
 1981 TGAGGAGCC AGCCTCTGG ATGCCGTGAC CTTGCTCTG TCGAGGAGC CCTGCGCAA
 Kir6.2
 +2 K R S V A V A K A K P K F S I S P D S L S
 2041 GCGCAGTGT GCTGTGGCAA AGGCCAAGCC CAAGTTAGC ATCTCTGGG ATTCTTGTG
 Kir6.2 NotI XbaI SfuI
 +2 S *
 2101 CTGATAGCG CGGCTCGAGT CTAGAGGGCC CTTCGACAA AAATCTATCT CAGAAGAGGA
 AgeI PmeI BGH pA
 2161 TCTGAATATG CATACCGGTC ATCATCAACA TCACCATGA GTTTAAACCC GCTGATCAGC
 BGH reverse prime
 BGH pA
 2221 CTCGACTGG CCTTCTAGTT GCGAGCATC TGTGTGTTG CCTTCCCCG TCGTTCTCT
 BGH reverse primer

[図17-3]

BGH pA						
2281	GACCCCTGGAA	GGTGTCACTC	CCACTGTCCT	TTCCTAATAA	AATGAGGAAA	TTCATGCGCA
BGH pA						
2341	TTGTCTGAGT	AGGTGTCAIT	CTATTCTGGG	GCGTGGGGTG	GGGCAGGACA	GCAAGGGGGA
BGH pA						
2401	GGATTGGGAA	GACAATAGCA	GGCATGCTGG	GSATGCGGTG	GGCTCTATGG	CTTCTGAGGC
fl origin						
2461	GGAAAGAACC	AGCTGGGGCT	CTAGGGGCTA	TCCCCAGCGG	CCCTGTAGCG	GCGCATTAAg
fl origin						
2521	CGCCGGCGGT	GTGGTGGTIA	CGCGCAGCGT	GACCGCTACA	CTTCCAGCGG	CCCTAGCGTC
fl origin						
2581	CGCTCCCTTC	GCCTTCTTCC	CTCCCTTCT	CGCCAGCTTC	GCCGCTTTC	CCCGTCAAGC
fl origin						
2641	TCTAAATCGG	GGGCTCCCTT	TAGGGTTCGG	ATTTASTGCT	TTACGGCACC	TGGACCCCAA
fl origin						
2701	AAAACITGAT	TAGGGTGAAG	GTTCAGGTAG	TGGGCGCATCG	CCCTGATAGA	CGGTTTTTCG
fl origin						
2761	CCCTTTGACG	TGGAGTCCA	CGTCTTTTAA	TAGTGGACTC	TTGTTCACAA	CTGGAACAAc
fl origin						
2821	ACTCAACCGT	ATCTCGGTCT	ATTCTTTTGA	TTTATAAGGG	ATTTGCCCA	TTCGGGCTTA
fl origin						
2881	TTGGTTAAAA	AATGAGCTGA	TTTAACAAAA	ATTTAACCGG	AATTAATTC	GTGGAATGTG
SV40 early promoter						
2941	TCTCAGTTAG	GGTGTGGAAA	GTCCCCAGGC	TCCCCAGCAG	GCAGAAGTAT	GCAAAGCAAG
SV40 early promoter						
3001	CATCTCAATT	AGTCAGCAAC	CAGGTGTGGA	AAGTCCCCAG	GCTCCCCAGC	AGGCAGAAAT
SV40 early promoter						
3061	ATGCCAAGCA	TGCATCTCAA	TTAGTCAGCA	ACCATAGTCT	CGCCCTAAC	TCCGCCCATC
SV40 early promoter						
3121	CGGCCCTTAA	CTCCGCCCAg	TTCCGCCCAT	TCTCCGCCCC	ATGCTGACT	AATTTTTTIT
SV40 early promoter						
3181	ATTTATCCAG	AGGTCGAGGC	CGCTCTGCCC	TCTGAGCTAT	TCCAGAAGTA	GTGAGGAGGC
SV40 early promoter						
3241	TTTTTTCGAG	GCCTAGGCTT	TTSCAAAAAG	CTCCCGGGAG	CTTGATATAT	CATTTTCGGA
Neo(R)						
3301	ICTGATCAGG	AGACAGGATG	AGGATCCTTT	CGCATGATTC	AACAAGATGG	ATTGCAGGTA
Neo(R)						
3361	GGTTCTCCGG	CCGCITGGGT	GGAGAGGCTA	TTCGGCTATG	ACTGGGCACA	ACAGACAATC
Neo(R)						
3421	GGCTGCTCTG	ATGCCGCCGT	GTTCGGGCTG	TCAGCGCAGG	GGCGCCCGGT	TCTTTTTCCT
Neo(R)						
3481	AAGACCGAOC	TGTCCGTTSC	CTTGAATGAA	CTCCAGGAGG	AGGCAGCGCG	GCTATCGTTC
Neo(R)						
3541	CTGSCUACGA	CGGGCGTTC	TTCGGCAGCT	GTCTCTGACG	TTGTCACTGA	AGCGGGAAGG
Neo(R)						
3601	GACTGCTGCG	TATTGGGCGA	AGTGCAGGCG	CAGGATCTCC	TGTCATCTCA	CCTTGCTCCT
Neo(R)						
3661	GCCGAGAAAG	TATCCATCAT	GCTGATSCA	ATGCCGCGGC	IGCATAGGCT	TGATCCGGCT
Neo(R)						
3721	ACCTGCCCAT	TGACCAACCA	AGCGAAACAT	CGCATCGAGC	GAGCACGTAC	TGGATGCAA

[図17-4]

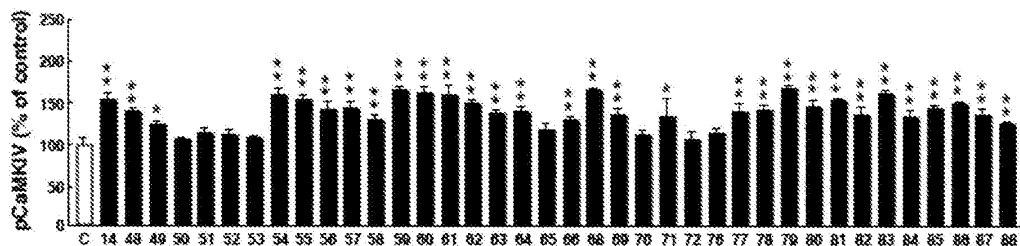
3781	GCCTGCTCTG TCGATCAGGA TGATCTGGAC GAAGACCATC AGGGGGCTCGC GCCAGCEGAA	Neo(R)
3841	CTGTTCCGCCA GGTCTCAAGGC GCGCATGCCG GACGGCGAGG ATCTCGTCTGT GACCCATGGC	Neo(R)
3901	GATGCTCTGCT TCGCGAATAT CATGGTGGAA AATGGCCGCT TTTCTGGATT CATCGACTGT	Neo(R)
3961	GGCCGGCTGG GTGTGGCGGA CCGCTATCAG GACATAGCGT TGGCTACCCG TGATATTGCT	Neo(R)
4021	GAAGAGCTTG GCGGCGAATG GGCTGACCGC TTCTCTCTGC TTTACGGTAT CGCCGCTCCC	Neo(R)
4081	GATTCGCAGC GCATCGCCTT CTATCGCCTT CTTCACGAGT TCTTCTGAGC GGGACTCTGG	Neo(R)
4141	GGTTCGCGAA ATGACCGACC AAGCGACGCG CAATCTCCCA TCACGAGATT TCGATTCCAC	
4201	CGCCGCCCTC TATGAAAGGT TGGGCTTCGG AATGCTTTTC CGGACGCGCG SCTGCAATGT	
4261	CCTCCAGGCG GGGGATCTCA TGCTGGAGTT CTTCGCCGAC CCCAACTTGT TTATTGCAGC	SV40 pA
4321	TTATAATGGT TACAAATAAA GCAATAGCAT CACAAATTTC ACAAATAAAG CATTITTTTC	SV40 pA
4381	ACTGCATTCT AGTTGTGGTT TGTCCAAACT CATCAATGTA TCTTATCATG TCTGTATACC	
4441	GTGACCTCTT AGCTAGAGCT TGGCGTAATC ATGGTCTATG CTGTTTCTCTG TGTGAATTC	
4501	TTATCCGCTC ACAATTCGAC ACAACATAGC AGCCGGAAGC ATAAAGTGTA AAGCTGGGG	
4561	TGCTTAATGA GTGAGCTAAC TCACATTAA TGGGTTGCGC TCACTGCCCG CTITTCAGTC	
4621	GGGAAACCTG TCGTGCCAGC TGCATTAATC AATCGGCGAA CGCGCGGGGA GAGGCGGTTT	
4681	GCGTATTGGG CGCTCTCCCG GTTCCTGGCT CACTGACTCG CTGGGCTCGG TCGTTCCGGT	
4741	GCGCGGAGCG GTATCAGCTC ACTCAAAGGT GGTAAATCGG TTATCCACAG AATCAGGGGA	
4801	TACCGCAGGA AAGAACATGT GAGCAAAAGH CCAGCAAAAG GCCAGGAACC GTAAAAAGGC	pUC origin
4861	CGGTTTCTG GCGTTTTTCC ATAGGCTCCG CCCCCTGAC GAGCATCACA AAAATCGAGC	pUC origin
4921	CTCAAGTCAG AGGTGGCGAA ACCCGACAGG ACTATAAAGA TACCAAGCGT TTCCTCTGG	pUC origin
4981	AAGCTCCCTC GTGCGCTCTC CTGTTCCGAC CCTGCCGCTT ACCGATACCC TGTCGCGCTT	pUC origin
5041	TCCTCCCTG GGAAGCGTGG CGTTTCTCA TAGCTCAGC TGTAGTATC TCAGTCTGTT	pUC origin
5101	GTAGGTCGTT CGTCCAAGC TGGGCTGTGT GCACAAACCC CCGTTTCAGC CCGACCGGTC	pUC origin
5161	CGCCITATCC GGTAACTATC GTCTTGAGTC CAACCGGTA AGACACGACT TATCGCCACT	pUC origin
5221	GSCASCAGCC ACTGGTAACA GGATTAGGAG AGCGAGGTAT GTAGGCGGTG CTACAGAGTT	pUC origin
5281	CTTGAAGTGG TGGCTAACT ACGGCTACAC TAGAAGACA GTATTGTA TCTGCGCTCT	pUC origin
5341	GCTGAAGCCA GTTACCTTCG GAAAAGAGT TGTAGTCTT TGATCCGSCA AACAAACCAC	pUC origin
5401	CGTGTGTAGC GGTGGTTTTT TTGTTTGCAG GCAGCAGATT ACSCGAGAA AAAAAGGATC	pUC origin

[図17-5]

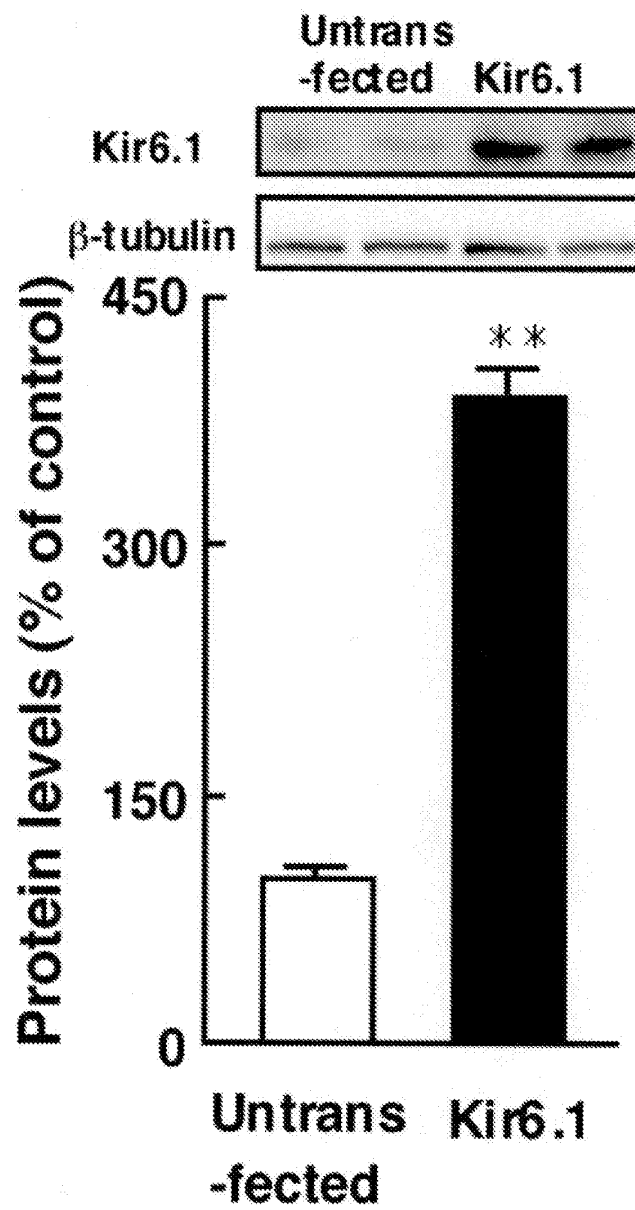
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	pUC origin
5521	TTAAGGSATT TTGGTCATGA GATTATCAAA AAGGATCTTC ACCTAGAICC TTTTAAATTA
5581	AAAATGAAGT TTAAATCAA TCTAAAGTAT ATATGAGTAA ACTTGGTCTG ACAGTTAECA
	Amp(R)
5641	ATGCITTAATC AGTGAGGCAC CTATCTCAGC GATCTGTCTA TTTCGTTTAT CCAIAGTTGC
	Amp(R)
5701	CIGACTCCCC GTGGTGTAGA TAACTACGAT ACGGGAGGGC TTACCATETG GCGCCAGTGC
	Amp(R)
5761	TGCAATGATA CCGCGAGACC CACGCTCACC GGCTCCAGAT TTATCAGCAA TAAACCAGGC
	Amp(R)
5821	AGCCGSAASG GCGGAGCSCA GAAGTGGTCC TGCACITTA TCCGCCICCA TCCAGTCTAT
	Amp(R)
5881	TAATTGTGTC CGGGAAGCTA GAGTAAAGTAG TTCGCCASTT AATAGTTTGC GCAACGTTGT
	Amp(R)
5941	TGCCATTGCT ACAGGCATCG TGGTGTCAAG CTCGTCTGTT GGTATGGCTT CATTGAGTTC
	Amp(R)
6001	CGGTTCCCAA CGATCAAGGC GAGTTACATG ATCCCCATG TTGTGCAAAA AAGCGTTAG
	Amp(R)
6061	CTCCTTCGGT CCTCCGATCG TTGTGAGAAG TAAGTTGSCC GCAGTGTAT CACTCATGGT
	Amp(R)
6121	TATGGCAGCA CTGCATAATT CTCTTACTGT CATGCCATCC GTAAGATGCT TTCTGTGAC
	Amp(R)
6181	TGGTGAGTAC TCAACCAAGT CATTCTGAGA ATAGTGTATG CGCGGACCGA TTGCTCTTG
	Amp(R)
6241	CCCGGGCTCA ATACGGGATA ATACCGCGCC ACATAGCAGA ACTTTAAAG TGCTCATCAT
	Amp(R)
6301	TGGAAAACGT TCTTCGGGGC GAAAACICTC AAGGATCTTA CCGCTGTGTA GATCCAGTTC
	Amp(R)
6361	GATGTAAACC ACTCGTCAC CCAACTGATC TTCAGCATCT TTTACTTTCA CCACGCTTTC
	Amp(R)
6421	TGGGTGAGCA AAAACAGGAA GGCAAAATGC CGCAAAAAAG GGAATAAGGG CGACACGGAA
	Amp(R)
6481	ATGTTGAATA CTCATACTCT TCCITTTTCA ATATTATTGA AGCATTATC AGGGTTATTG
	Amp(R) bla promoter
6541	TCTCATGAGC GGAIACATAT TTGAATGTAT TTAGAAAAAT AAACAAATAG GGGTCCCGG
	bla promoter
6601	CACATTTCCC CGAAAAGTSC CACCTGACGT C

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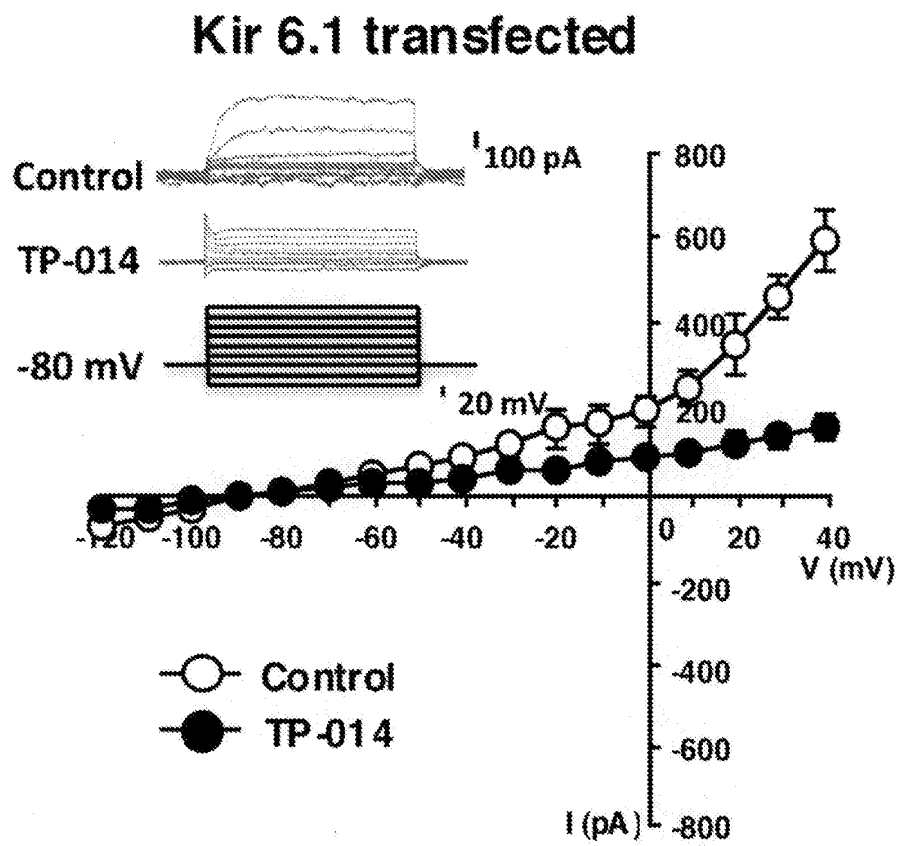
Kir6.1 overexpressed in Neuro2A cells



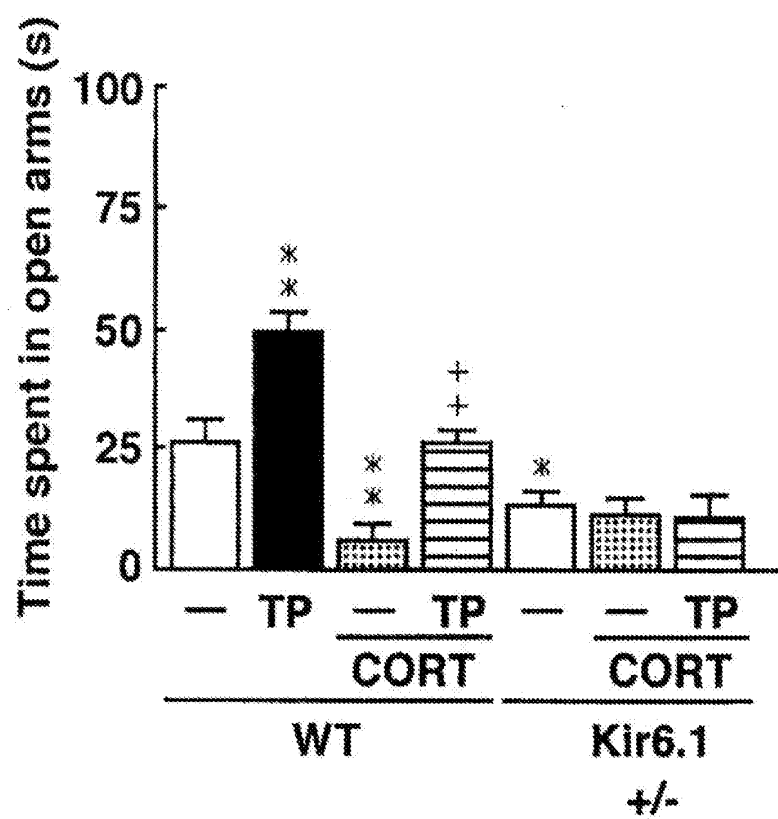
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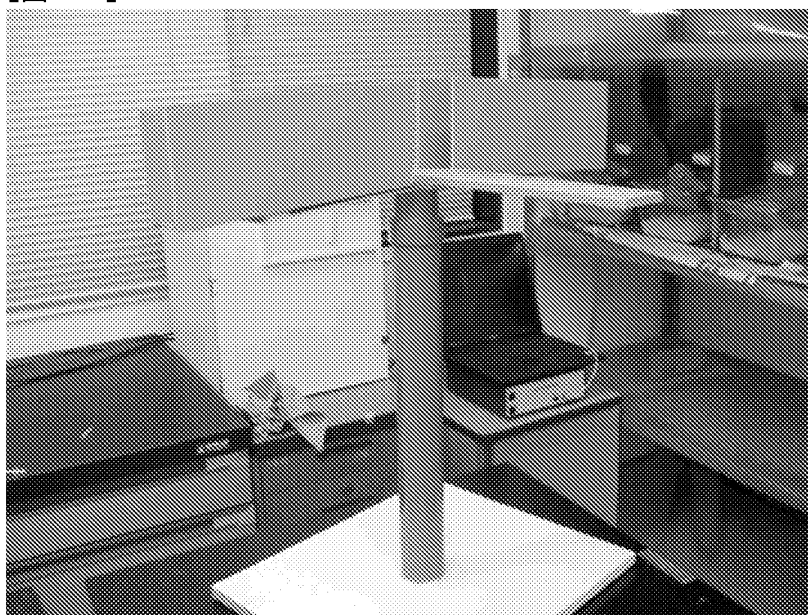
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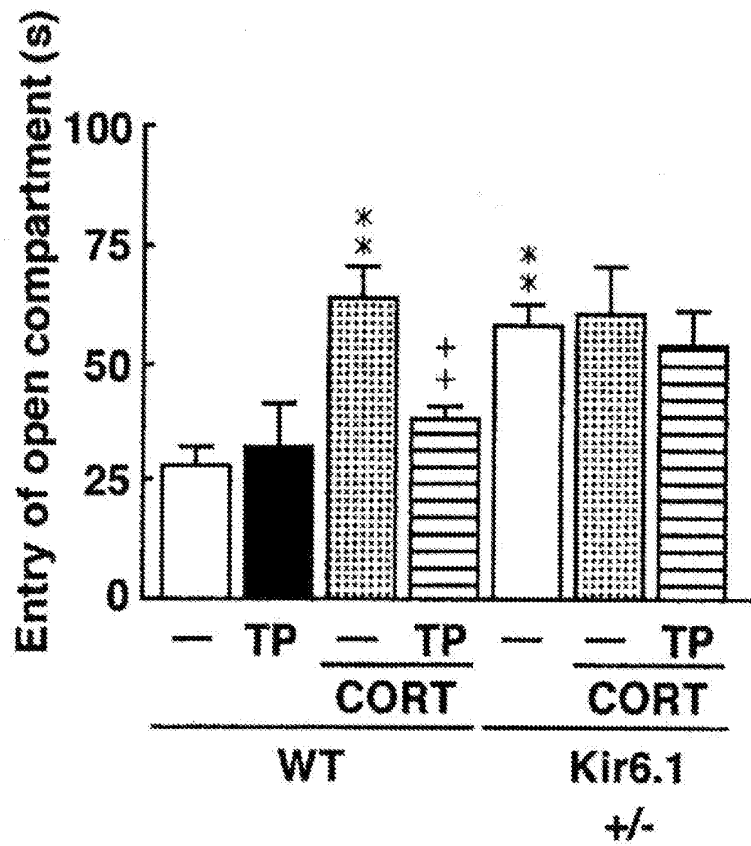
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[図19-2]



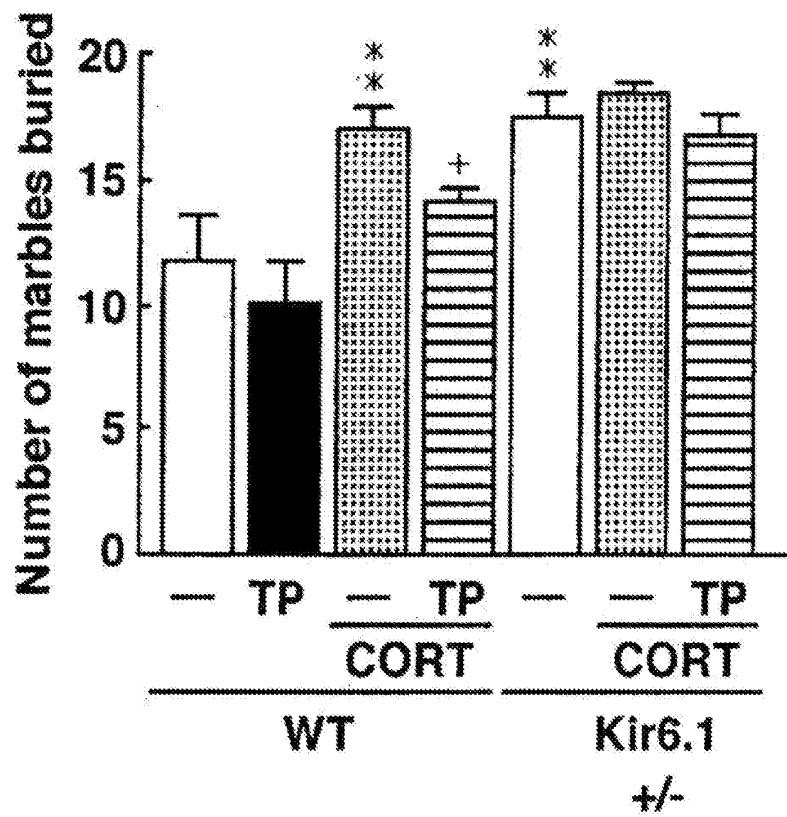
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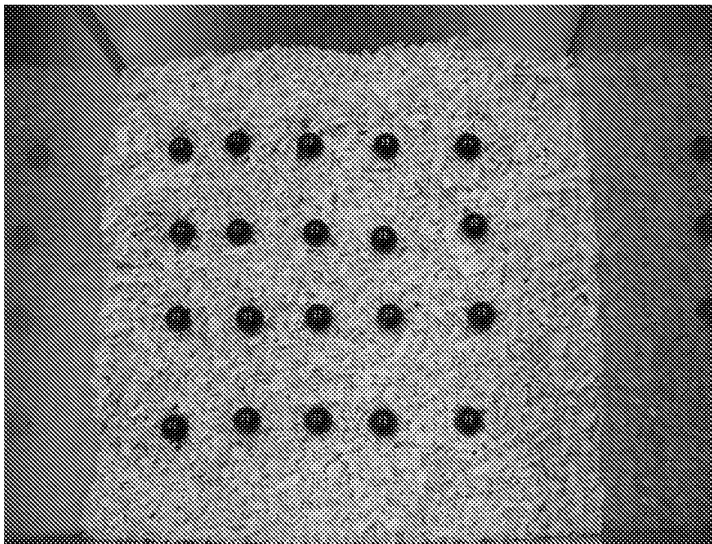
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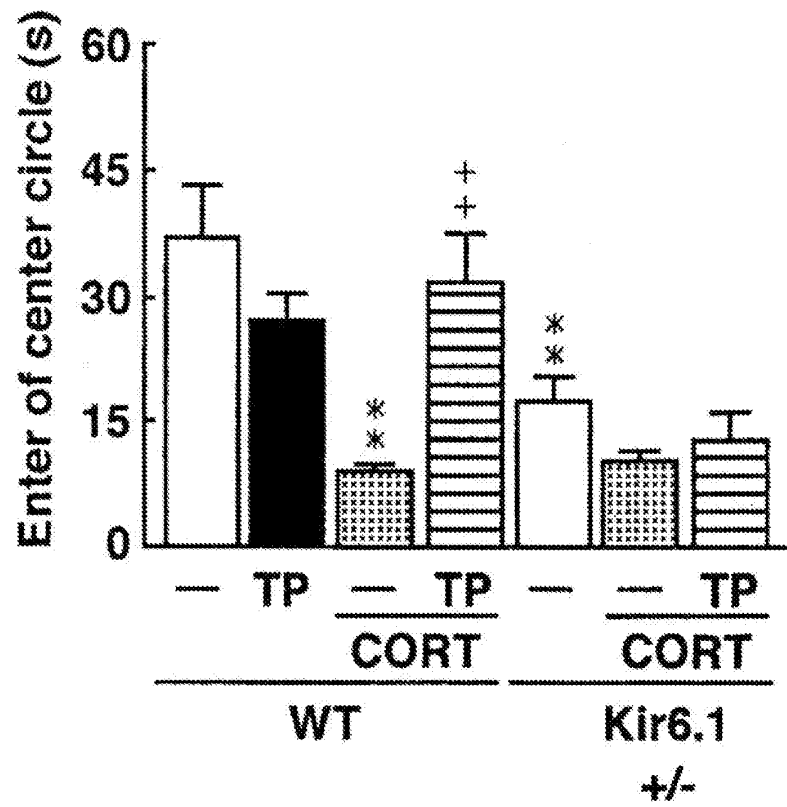
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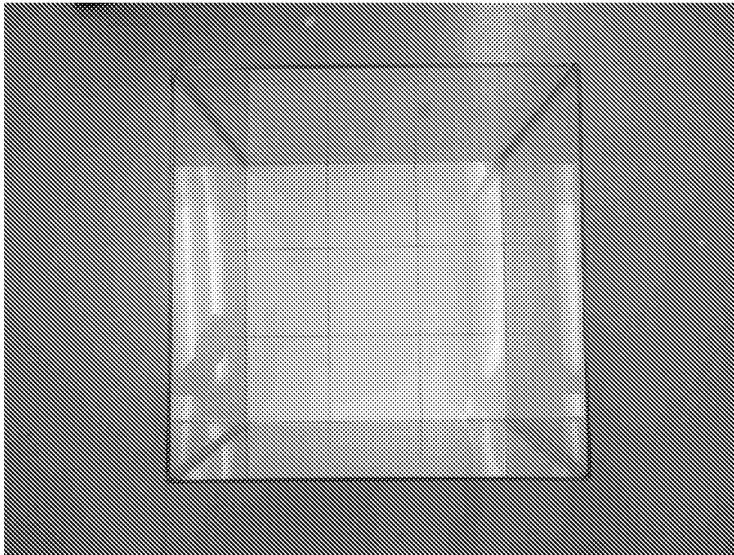
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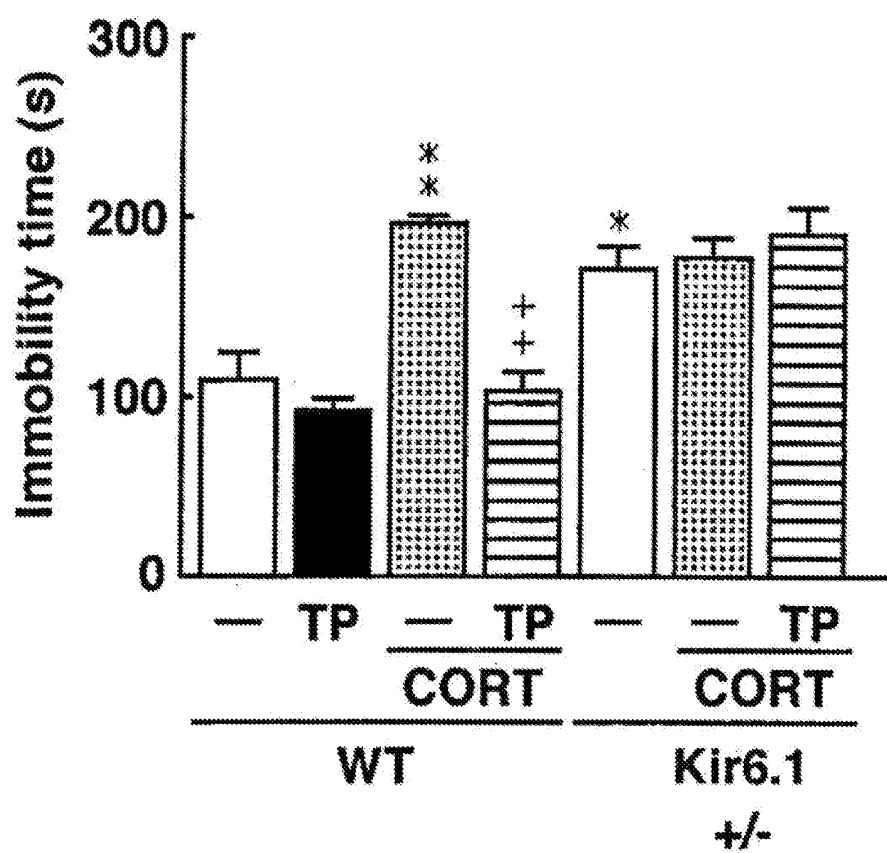
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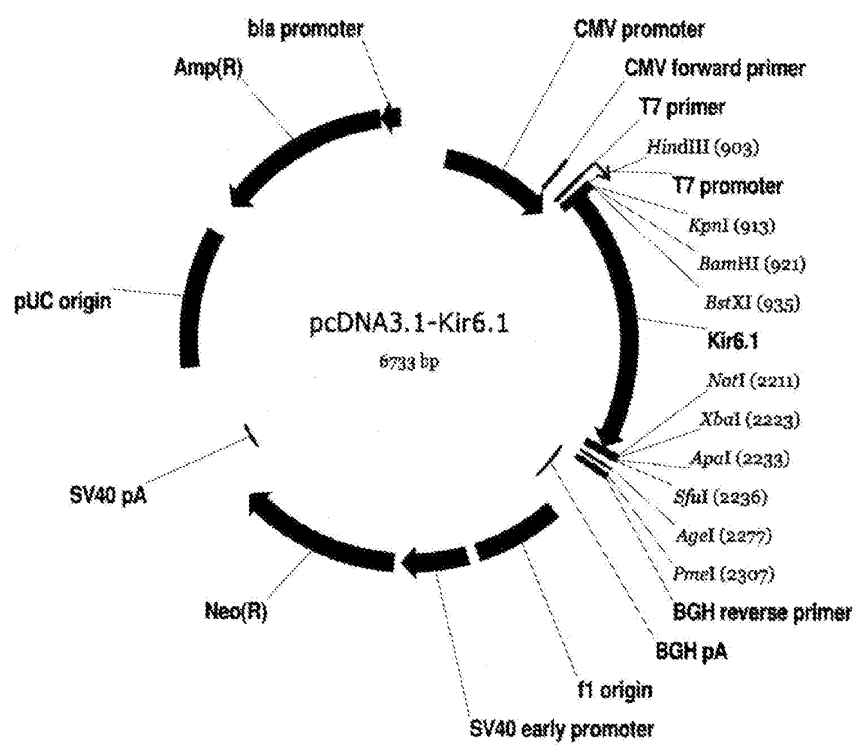
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[図19-9]



[図20]



[図21-1]

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61	CCGCAIAGIT AAGCCAGTAT CTGCTCCCTG CTTGTGIGTI GGAGGTGCTI GAGTAGTGGG
121	CGAGCAAAAT TTAAGCTACA ACAAGGCAAG GCTTGACCGA CAATIGCATG AAGAATCTGC
CMV promoter	
181	TTAGGGTTAG GCGTTTTGCS CTGCTTCGCG ATGIACGGG CAGATATACG CGTIGACATT
CMV promoter	
241	GATTATGAC TAGTIATTAA TAGTAATCAA TIACGGGTC ATTAGTTCAT AGCCCATATA
CMV promoter	
301	TGGAGTTCGS CGITACATAA CITACGGTAA ATGGCCCGCC TGGCTGACCG CCCAACGACC
CMV promoter	
361	CCCGCCCATI GACGTCAAIA ATGACGTAIS TCCCATAGI AACGCCAATA GGGACTITCC
CMV promoter	
421	ATTGACGICA ATGGGTGGAC TATTIACGGT AACTGCCCA GTTGSCAGTA CATCABGTGT
CMV promoter	
481	ATCATATGCC AAGTACGCC CATTATTACG TCAATGACCG TAAATGGCCG GCTTGGCAIT
CMV promoter	
541	ATGCCCACTA CATGACCTTA TGGGACTTTC CTACTTGGCA GTACATCTAC GTATTAGTCA
CMV promoter	
601	TGGCTATTAC CATGGTGAIG CGGTTTTGGC AGTACATCAA TGGCCGTGGA TAGCGGTTTG
CMV promoter	
661	AUTCACGSGG ATTICCAAST CTCCACCCCA TTGACGTCAA TGGGAGITTS ITTIGGCACC
CMV forward primer	
CMV promoter	
721	AAAATCAACG GGACTTTCCA AAATGTCTTA ACAACTCCGC CCCATTGACG CAAATGGGCS
CMV forward primer	
CMV promoter	
781	GTAGGCGTGT ACGGTGGGAS GTCTATATAA SCAGAGCTCT CTGGCTAACT AGAGAACCCA
T7 primer	
CMV promoter	
T7 promoter	
841	CTGCTTAATG GCTTATCGAA ATTAATACGA CTCACIATAG GGAGACCCAA GCTGGCTAGT
KpnI	
BamHI	
BstXI	
Kir6.1	
+2	M L A R K S I I P E
901	TAACTTGGT ACCGAGCTCG GATCCGCCAC CATGCTGGCC AGGAGAGCA TCATCCGGA
Kir6.1	
+2	E E Y V L A R I A A E N L R K P R I R D R
961	GGAGTATGTG CTGGCCCGCA TCGCCGCGGA GAACCTGGCG AAACCGCGCA TCCGCGACCG
Kir6.1	
+2	R L P K A R F I A K S G A C N L A H K N I
1021	CCTCCCCAAA GCCCGCTTCA TCGCCAAGAG CGGAGCCTGC AACCTGGCTC ACAAGAACAT
Kir6.1	
+2	I R E Q G R F L Q D I F T T L V D L K W R
1081	CCGAGAGCAA GGTCCCTTCC TGCAGGACAT CTTACCCACC TTGGTAGAAC TGAAGTGGCG
Kir6.1	
+2	R H T L V I F T M S F L C S W L L F A I M
1141	TCACACGCTG GTCATCTTCA CCATSTCCTT CCTCTGCAGC TGGCTGCTCT TCGCTATCAT
Kir6.1	
+2	M W W L V A P A H G D I Y A Y M E K G I T
1201	GTGGTGGCTG GTGGCCTTCG CCCACGGGGA CATCTATGCT TACATGAGA AAGGCATCAC

+2 T E K S G L E S A V C V T N V R S F T S A
 1261 GGAGAAGAGT GGCCTGGAGT CTGCCGCTCT TGIGACCAAT GTCAGGTCAT TCACCTCTSC
 Kir6.1
 +2 A F L F S I E V Q V T I G F G G R M M T E
 1321 GTTCTCTCTC TCCATCGAGG TTCAAGTGAC CATTGGGTTT GGAGGGAGAA TGATGACTGA
 Kir6.1
 +2 E E C P L A I T V L I L Q N I V G L I I N
 1391 GGAGTCCCCC CTGGCCATCA CGGTTTGTAT TCTGCAGAAC ATTGTGGGTC TGATCATCAA
 Kir6.1
 +2 N A V M L G C I F M K T A Q A H R R A E T
 1441 CGCGGTCAATG TTGGGCTGCA TCTTCATGAA GACGGCCAG GCCACAGAA GGSCASAGAC
 Kir6.1
 +2 T L I F S R H A V I A V R N G K L C F M F
 1501 GCTGATTTTC AGCGGCCATG CTGTAATTGC GGTCCGTAAI GGCAGGTGT GCTTCATGTT
 Kir6.1
 +2 F R V G D L R K S M I I S A S V R I Q V V
 1561 CCGGGGGGGT GACCTGAGSA AAAGCATGAT CATTAGCGCC TCGGTGCGCA TCCAGGTGCT
 Kir6.1
 +2 V K K T T T P E G E V V P I H Q Q D I P V
 1621 CAAGAAAACC ACGACGCCAG AAGGAGAGGT GTTGCTTAT CACCAGCAGG ACATCCCTGT
 Kir6.1
 +2 V D N P I E S N N I F L V A P L I I C H V
 1681 GGATAATCC ATCGAGAGCA ATAACATCTT CTTAGTGGCC CTTTGTATCA TCTGCCATGT
 Kir6.1
 +2 V I Q K R S P L Y D I S A T D L V N Q D L
 1741 GATTGATAAG CGTAGCCGCC TGTACGATAT CTAGGCCAT GACCTTGTC ACCAAGACCT
 Kir6.1
 +2 L E V I V I L E G V V E T T G I T T Q A R
 1801 GGAGGTCATA GTGATCTCTG AGGGCGTGTG GGAACCACG GGCATCACCA CGCAGCSCG
 Kir6.1
 +2 R T S Y I A E E I Q W G H R F V S I V T E
 1861 GACCTCTTAC ATTGCAGAG AGATCCAGTG GGGACACCG TCTGTCTCGA TTGTGACTGA
 Kir6.1
 +2 E E E G V Y S V D Y S K F G N T V R V A A
 1921 GGAGGAGGSA GTGTACTCTG TGACTAATC TAAATTGGT AATCTGTGA GAGTGGGCGG
 Kir6.1
 +2 A P R C S A R E L D E K P S I L I Q T L Q
 1981 GCCAAGATCC AGTCCCGGG AGCIGGACGA GAAACCTTCC ATCTTGATC AGAOCCTECA
 Kir6.1
 +2 Q K S E L S H Q N S L R K R N S M R R N N
 2041 AAAGACTGAA CTGTCCGACC AGAATCTCT GAGGAAGCGC AACCTATGA GAAGAACAA
 Kir6.1
 +2 N S M R R S N S I R R N N S S L M V P K V
 2101 CTCCATGAGG AGGAGCAACT CATCCGGAG GATTAATCT TCCCTCATG TGCCCAAGT
 Kir6.1 NotI
 +2 V Q F M T P E G N D C P S E S
 2161 GCAATTCATG ATCCAGAAG GAAACCACTG CCCATCAGAA TCATGATAGC GGCCSCCTGA
 Apal
 XbaI SfuI
 2221 GTCTAGAGGG CCTTCTGAAC AAAAATCAT CTCAGAAGAG GATCTGAATA TGCAATCCGG

[図21-3]

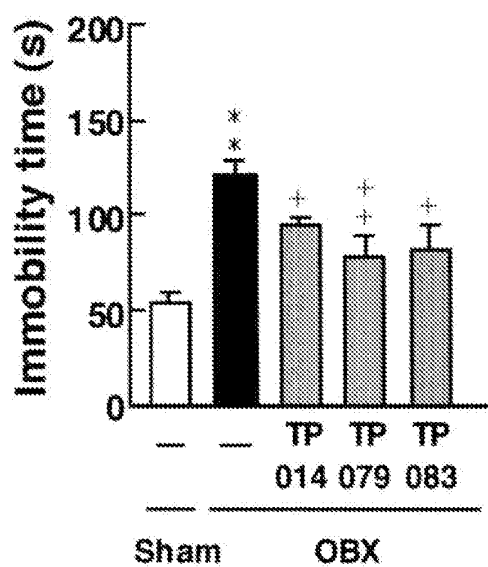
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					BGH reverse primer
					BGH pA
2341	TTGCCAGCCA	TCTGTTSTTT	GCCCCCTCCC	CGTGCCTTCC	ITGACCCTGG AAGGTGCGAC
					BGH pA
2401	TCCCACTGTC	CTTTCCTAAT	AAAATGAGGA	AATTGCATCG	CATTGICTGA GTAGGTGTCA
					BGH pA
2461	TTCTATTCTG	GGGGGTGGGG	TGGGGCAGGA	CAGCAAGGGG	GAGGATTGGG AAGACAATAG
					BGH pA
2521	CAGGCATGCT	GGGGATGCGG	TGGGCTCTAT	GSCITCTGAG	GCGGAAAGAA CCAGCTGGGG
					f1 origin
2581	CTCTASGGGG	TATCCCCACG	CGCCCTGTAG	CGGCGCAATTA	AGCSCGCGGG GTGTGGTGGT
					f1 origin
2641	TACGCGCAGC	GTGACCGCTA	CACITGCCAG	CGCCCTAGCG	CCCGCTCTTT TCGTTTTCTT
					f1 origin
2701	CCCTCTCTTT	CTCGCCACGT	TGCGCGGCTT	TCCCGCTCAA	GCTCTAAATC GGGGGCTCCC
					f1 origin
2761	TTTAGGGTTC	CGATTIAGTG	CITTACGGCA	CCTCGACCCC	AAAAAACITG ATTAGGGTGA
					f1 origin
2821	TGGTTCACGT	AGTGGGCCAT	CGCCCTGATA	GACGGTTTTT	CGCCCTTTGA CTTGGGASTC
					f1 origin
2881	CACGTCCTTT	AATAGTGGAC	TCTTGTTCCT	AACITGGAACA	ACACTCAACC CTATCTCGGT
					f1 origin
2941	CTATCTTTTT	GATTIATAAG	GGATTITGCC	GATTTCGGCC	TATTGGTTAA AAAATGAGCT
					f1 origin
3001	GAITTAACAA	AAATTAACG	CGAATTAATT	CTGTGGAATG	TGTGTCAATT AGGGTGTGGA
					SV40 early promoter
3061	AAGTCCCCAG	GCTCCCCAGG	AGGCAGAAGT	ATGCAAAGCA	TGCACTCTAA ITAGTCAGCA
					SV40 early promoter
3121	ACCAGGTGTG	GAAAGTCCCC	AGGCTCCCCA	GCAGGCAGAA	GTATGCAAAG CATGCATCTC
					SV40 early promoter
3181	AATTAGTCAG	CAACCATAGT	CCCGCCCCCT	ACTCCGCCCA	TECGSCCCTT AACTCCGCCC
					SV40 early promoter
3241	AGTCCCGCCC	ATTCTCCGCC	CCATGGCTGA	CTAATTTTTT	TTATTTATGC AGAGGCCGAG
					SV40 early promoter
3301	GCCGCCCTCT	CCCTGTAGCT	ATTCCAGAAG	TAGTGASGAG	GCTTTTTTGG AAGCCTAGGC
					SV40 early promoter
3361	TTTTGCAAAA	AGCTCCCGGG	AGCTTGTAIA	TCCATTITCG	GATCTGATCA AGAGACAGGA
					Neo(R)
3421	TGAGGATCGT	TTGCAATGAT	TGAACAAGAT	GGATTCCACG	CAGGTTCTCC GGCGGCTTGG
					Neo(R)
3481	GTGAGAGGCC	TATTCCGCTA	TGACTGGGCA	CAACAGACAA	TCGGCTGCTC TGATGCCGCG
					Neo(R)
3541	GTGTTCCGCC	TGTCAGCGCA	GGGGCGCCCG	GTTCTTTTTG	TCAGACCGGA CCTGTCCGGT
					Neo(R)
3601	GCCCTGAATG	AACTGCAGGA	CGAGGCAGCG	CGGCIATCGT	GGCTGSCCAC GACGGGCGTT
					Neo(R)
3661	CCTTGCGCAG	CTGTGCTCGA	CCTTGTCAC	GAAGCGGGAA	GGGACTGCTT GCTATTGGGC

3721 GAAGTGGCCG GGCAGGATCT CTTGTCACTT CACCTTCTCT CTGCCGAGAA AGTATCCATC
 (Neo(R))
 3781 ATGGCTGATG CAATGGGGCG GTTGCAATCG TTGATCCGG CTACCTGCCC ATTCCAGCAC
 (Neo(R))
 3841 CAAGCGAAAC ATGCGATCGA GCGAGCACTT ACTCGGATGG AAGCCGGTCT TGTGATCAG
 (Neo(R))
 3901 GATGATCTGG ACGAAGAGCA TCAGGGGCTC GCGCCAGCCG AACTGTTCGC CAGGCTCAAG
 (Neo(R))
 3951 GCGGCGATGC CCGACGGCGA GGATCTCTCT GTGACCCATG GCGATGCTTG CTTGCCGAAT
 (Neo(R))
 4021 ATCATGGTGG AAAATGGCCG CTTTCTCGA TTCATCGACT GTGGCCGGCT GGGTGTGGCG
 (Neo(R))
 4081 GACCGCTATC AGGACATAGC GTTGGCTACC CGTGATATTG CTGAAGAGCT TGGCGGCGAA
 (Neo(R))
 4141 TGGGCTGACC GCTTCTCTCT GCTTACGGT ATCGCCGCTC CCGATTCGCA GCGCATCGCC
 (Neo(R))
 4201 TTCTATCGCG TTCTTACGCA GTTCTTCTGA GCGGGACTCT GGGGTTCGCG AAATGACCGA
 4261 CCAAGCGAGC CCAAACTGTC CATCAGGAGA TTCTGATTCG ACCGCGGCTT TCTATGAAAG
 4321 GTTGGGCTTC GGAATGTTT TCGGGGAGCG CGGCTGGATG ATCTCCAGC GCGGGGATCT
 (SV40 pA)
 4381 CATGCTGGAG TTCCTGCCC ACCCCACTT GTTTATTGCA GCTTATAATG GTTACAAATA
 (SV40 pA)
 4441 AAGCAATAGC ATCACAATTT TCACAATAA AGCATTTTTT TCACTGCATT CTAGTTGTGG
 (SV40 pA)
 4501 TTTGTCCAAA CTCATCAATG TATCTTATCA TGTCTGTAIA CCGTCGACCT CTAGCTAGAG
 4561 CTTGCGGTAA TCATGGTCAAT AGCTGTTCCT TGTGTGAAAT TGTATCCCG TCACAATTCG
 4621 ACACAACATA CGAGCCCGAA GCATAAAGTG TAAAGCGCTG GTTGCCTAAT GAGTGAAGTA
 4681 ACTCACAATA ATTGCGTTCG GCTCACTGCC CGCTTTCAG TCGGGAAACC TGTCGTGCA
 4741 GCTGCATTAA TGAATCGGCC AACGCGCGGG GAGAGGCGGT TTGCGTATTG GCGCTCTCTC
 4801 CGCTTCTCTG CTCACTGACT CGCTGCGCTC GGTCTGTCGG CTGCGGCGAG CCGTATCAGC
 4861 TCACTCAAAG GCGGTAATAC GGTATTCAC AGAATCAGGG GATAACGCG GAAAGAACAT
 (pUC origin)
 4921 GTGAGCAAAA GGCCAGCAAA AGGCCAGGAA CCGTAAAAAG GCGCGCTTGC TGGCGTTTTT
 (pUC origin)
 4981 CCATAGGCTC GCGCCCCCTG ACGAGCATCA CAAAATCGA CGCTCAAGTC AGAGGTGGCG
 (pUC origin)
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 (pUC origin)
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 (pUC origin)
 5161 GCGCTTTTCT CATAGCTCAC GTGTAGGTA TCTCAGTTC GTGTAGGTCG TCGCTTCAA
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 (pUC origin)
 5281 TCGTCTTGAG TCCAACCCGG TAAGACACGA CTAATCGCCA CTGCGAGCAG CCACTGGTAA
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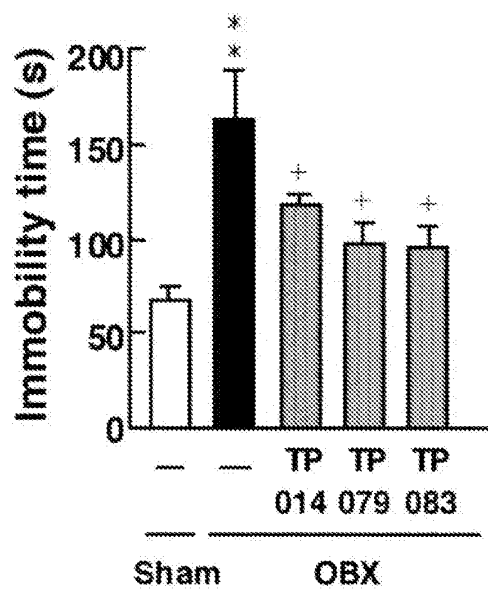
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	pUC origin
5521	TTTTGTTTGC AAGCAGCAGA TTACGCGCAG AAAAAAAGGA TCTCAAGAAG ATCCTTTGAT
	pUC origin
5581	CTTTCTACG GGGTCTGACC CTCAGTGGAA CGAAACTCA CGTTAAGGGA TTTTGGTCAT
	pUC origin
5641	GAGATTATCA AAAAGGATCT TCACCTAGAT CCTTTTAAAT TAAAAATGAA GTTTTAAATC
5701	AATCTAAAGT ATATATGAGT AAACITGGTC TGACAGITAC CAATGCITAA TCAGTGAGGC
	Amp(R)
5761	ACCTATCTCA GCGATCTGTC TATTTCGTTT ATCCATAGTT GCTGACTCC CCGTCGTGTA
	Amp(R)
5821	GATAACTACG ATACGGGAGG GCTTACCATC TGGCCCGAGT GCTGCAATGA TACCGCGAGA
	Amp(R)
5881	CCCACGCTCA CCGGCTCCAG ATTTATCAGC AATAAACAG CCAGCCGAA GGGCCGAGCG
	Amp(R)
5941	CAGAASTGGT CTGCAACTT TATCGGCTC CATCCAGTCT ATTAATTGTT GCCGGGAAGC
	Amp(R)
6001	TAGAGTAAGT AGTTCGCCAG TTAATAGTTT GCGCAACGTT GTTGCCATTG CTACAGGCAT
	Amp(R)
6061	CGTGGTGTCA CGCTCCTCCT TGGTATGCT TCCATTGAGC TCCGGTTCCT AACGATCAAG
	Amp(R)
6121	GCGAGTTACA TGATCCGCGA TTTTGTGCAA AAAAGCGGTT AGCTCCITCG GTGCTCCGAT
	Amp(R)
6181	CGTGTTCAGA AGTAAGTTGG CCGCAGTGTT ATCAGTCATG GTTATGCGAG CACTGATATA
	Amp(R)
6241	TTCTCTACTT GTCATGCCAT CCGTAAGATG CTTTCTGTGG ACTGGTGGT ACTCAACCA
	Amp(R)
6301	GTCATTCTGA GAATAGTGTA TCGCGCGACC GAGTTCTCTT TGCCCGGCGT CAATACGGGA
	Amp(R)
6361	TAAATCCGCG CCACATAGCA GAACITTTAA AGTGTCTCAT ATTGAAAAAC GTTCTTCGGT
	Amp(R)
6421	GCGAAAACTC TCAAGGATCT TACCGCTGTT GAGATCCAGT TCGATGTAA CCACTCGTGC
	Amp(R)
6481	ACCCAACCTG TCTTACGAT CTTTACTTIT CACCAGCGTT TCTGGGTGAG CAAAAACAGG
	Amp(R)
6541	AAGGCAAAAT GCGCAAAAA AGGGAATAAG GCGACACGG AATGTTGAA TACTCATACT
	bla promoter Amp(R)
6601	CTTCCTTTT CAATATTAT GAAGCAITTA TCAGGGITAT TGCTCATGA GCGATACAT
	bla promoter
6661	ATTGAATGT ATTTAGAAAA ATAAACAAAT AGGGGTTCCG GGCACATTTC CCGGAAAGT
	bla promoter
6721	GCCACCIGAC GTC

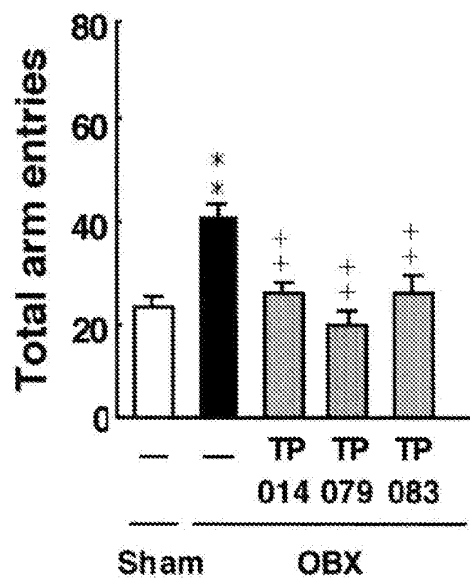
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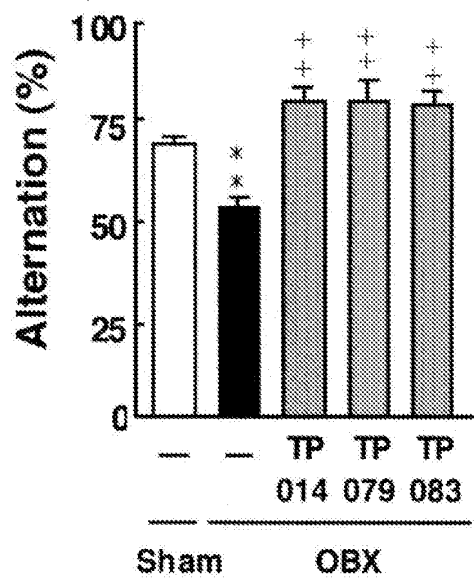
[図22-2]



[図22-3]



[図22-4]



[図22-5]

