

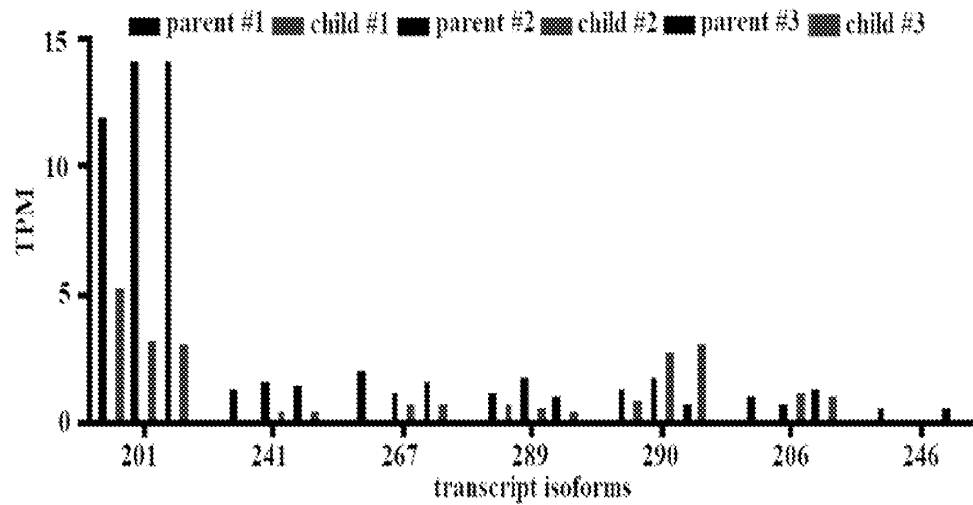


FIG. 1A

Transcript Name	Protein isoform
201	TCF4-B+
241	TCF4-F-
267	TCF4-B+
289	TCF4-B+
290	TCF4-D+
206	TCF4-D-
246	TCF4-A-

FIG. 1B

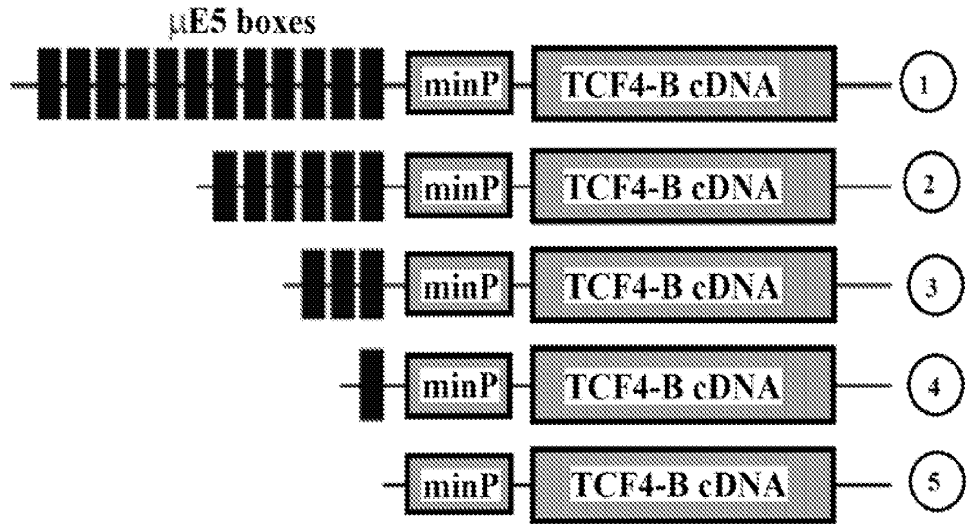


FIG. 2A

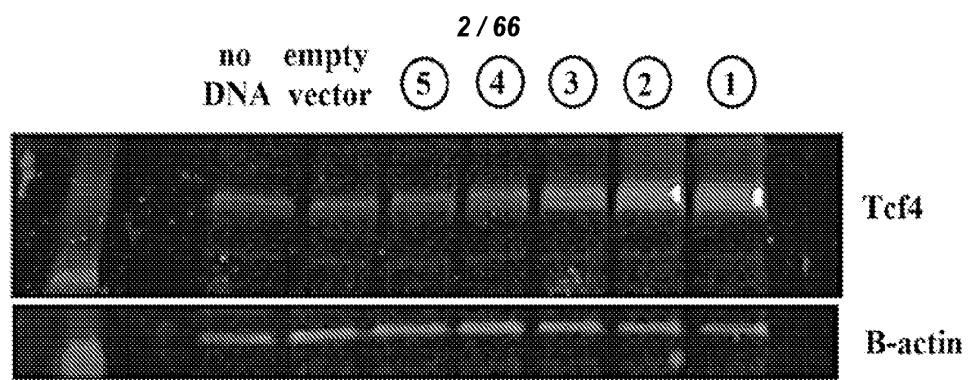


FIG. 2B

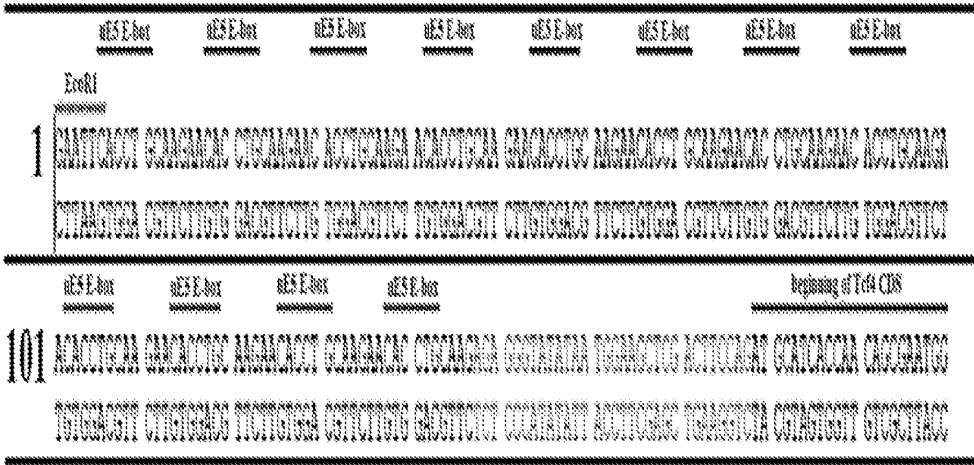


FIG. 2C

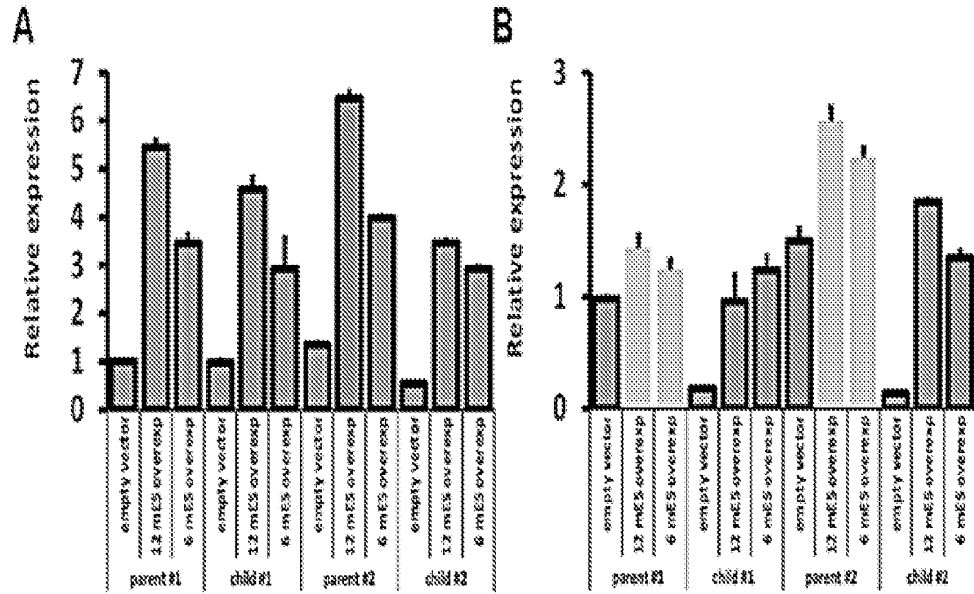


FIG. 3A

FIG. 3B

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Construct #1; Name of plasmid: ARN65**: 12 microE5 boxes + minP + TCF4 coding sequence (SEQ ID NO:4)**

gaattcacctgcaagaacacctgcaagaacacctgcaagaacacctgcaagaacacctgcaagaaca
 cctgcaagaacacctgcaagaacacctgcaagaacacctgcaagaacacctgcaagaacacctgcaa
 gaacacctgcaagagaggtatataatggaagctcgacttccagATGCATCACCACAGCGAATGGC
 TGCCTTAGGGACGGACAAAGAGCTGAGTGATTTACTGGATTTTCAGTGCGATGTTTTACCTCCTGTG
 AGCAGTGGGAAAAATGGACCACTTCTTTGGCAAGTGGACATTTTACTGGCTCAAATGTAGAAGACA
 GAAGTAGCTCAGGGTCTTGGGGGAATGGAGGACATCCAAGCCCGTCCAGGAATATGGAGATGGGAC
 TCCCTATGACCACATGACCAGCAGGGACCTTGGGTACATGACAATCTCTCTCCACCTTTTGTCAAT
 TCCAGAATACAAAGTAAACAGAAAGGGGCTCATACTCATCTTATGGGAGAGAATCAAACCTTACAGG
 GTTGCCACCAGCAGAGTCTCCTTGGAGGTGACATGGATATGGGCAACCCAGGAACCTTTTCGCCAC
 CAAACCTGGTTCCAGTACTATCAGTATTCTAGCAATAATCCCCGAGGAGGCCTTTTCACAGTAGT
 GCCATGGAGGTGCAGACAAAGAAAGTTTCAAAAGTTCTCCAGGTTTGCCATCTTCAGTCTATGCTC
 CATCAGCAAGCACTGCCGACTACAATAGGGACTCGCCAGGCTATCCTTCCCTCAAACCCAGCAACCAG
 CACTTTCCCTAGCTCCTTCTTCATGCAAGATGGCCATCACAGCAGTGACCCTTGGAGCTCCTCCAGT
 GGGATGAATCAGCCTGGCTATGCAGGAATGTTGGGCAACTCTTCTCATATTCACAGTCCAGCAGT
 ACTGTAGCTGCATCCACATGAACGTTTGAGTATCCATCACACTCCTCAGCAGACATCAATTCAG
 TCTTCTCCGATGTCCACTTTCCATCGTAGTGGTACAAACATTACAGCACCTTCTCCTGTACGCT
 CCTGCCAACGGGACAGACAGTATAATGGCAAATAGAGGAAGCGGGGAGCCGGCAGCTCCCAGACTG
 GAGATGCTCTGGGGAAGCACTTGCTTCGATCTATTCTCCAGATCACACTAACACAGCTTTTCATC
 AAACCTTCAACTCCTGTTGGCTCTCCTCCATCTCTCTCAGCAGGCACAGCTGTTTGGTCTAGAAAT
 GGAGGACAGGCCTCATCGTCTCCTAATTATGAAGGACCTTACACTCTTTGCAAAGCCGAATTGAAG
 ATCGTTTAGAAAGACTGGATGATGCTATTCATGTTCTCCGGAACCATGCAGTGGGCCCATCCACAGC
 TATGCCTGGTGGTCATGGGGACATGCATGGAATCATTGGACCTTCTCATAATGGAGCCATGGGTGGT
 CTGGGCTCAGGGTATGGAACCGGCTTCTTTTCAGCCAAACAGACATTCATCATGGTGGGGACCCATC
 GTGAAGATGGCGTGGCCCTGAGAGGCAGCCATTCTCTTCTGCCAAACAGGTTCCGGTTCCACAGCT
 TCCTGTCCAGTCTGCGACTTCCCCTGACCTGAACCCACCCAGGACCCTTACAGAGGCATGCCACCA
 GGACTACAGGGGCAGAGTGTCTCCTCTGGCAGCTCTGAGATCAAATCCGATGACGAGGGTGATGAGA
 ACCTGCAAGACACGAAATCTTTCGGAGGACAAGAAATTAGATGACGACAAGAAGGATATCAAATCAAT
 TACTAGGTCAAGATCTAGCAATAATGACGATGAGGACCTGACACCAGAGCAGAAGGCAGAGCGTGAG
 AAGGAGCGGAGGATGGCCAACAATGCCGAGAGCGTCTGCGGGTCCGTGACATCAACGAGGCTTTCA
 AAGAGCTCGGCCGATGGTGCAGCTCCACCTCAAGAGTGACAAGCCCCAGACCAAGCTCCTGATCCT
 CCACCAGGCGGTGGCCGTATCCTCAGTCTGGAGCAGCAAGTCCGAGAAAGGAATCTGAATCCGAAA
 GCTGCGTGTCTGAAAAGAGGGAGGAAGAGAAGGTGTCTCAGAGCCTCCCCCTCTCTCCTTGGCCG
 GCCACACCTTGAATGGGAGACGCATCGAATCACATGGGACAGATGTAActcgagata

Features:

Name	Location	Length	Comment
Artificial promoter	1-178	178	Lowercase
microE5 box	6-11	6	
microE5 box	18-23	6	
microE5 box	30-35	6	
microE5 box	42-47	6	
microE5 box	54-59	6	
microE5 box	66-71	6	
microE5 box	78-83	6	
microE5 box	90-95	6	
microE5 box	102-107	6	
microE5 box	114-119	6	
microE5 box	126-131	6	
microE5 box	138-143	6	
minP minimal promoter	148-178	31	Underlined
TCF4 coding sequence	179-2194	2016	Uppercase

FIG. 4A

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Construct #2**Name of plasmid: ARN60****minP + TCF4 coding sequence, without microE5 boxes (SEQ ID NO:5)**

gaattcagaggggtatataatggaagctcgacttccagATGCATCACCAACAGCGAATGGCTGCCTTA
 GGGACGGACAAAGAGCTGAGTGATTTACTGGATTTTCAGTGCGATGTTTTACCTCCTGTGAGCAGTG
 GGAAAAATGGACCAACTTCTTTGGCAAGTGGACATTTTACTGGCTCAAATGTAGAAGACAGAAGTAG
 CTCAGGGTCTGGGGGAATGGAGGACATCCAAGCCCGTCCAGGAAGTATGGAGATGGGACTCCCTAT
 GACCACATGACCAGCAGGACCTTGGGTACATGACAATCTCTCTCCACCTTTTGTCAATTCCAGAA
 TACAAAGTAAACAGAAAGGGGCTCATACTCATCTTATGGGAGAGAATCAAACCTTACAGGGTTGCCA
 CCAGCAGAGTCTCCTTGGAGGTGACATGATATGGGCAACCCAGGAACCTTTTCGCCACCAAACCT
 GGTTCCTCAGTACTATCAGTATTCTAGCAATAATCCCGAAGGAGGCTCTTCACAGTAGTGCCATGG
 AGGTGCAGACAAAGAAAGTTCGAAAAGTTCCTCCAGGTTTGCCATCTTCAGTCTATGCTCCATCAGC
 AAGCACTGCCGACTACAATAGGGACTCGCCAGGCTATCCTTCCTCCAAACAGCAACAGCACTTTC
 CCTAGCTCCTTCTTCATGCAAGATGGCCATCACAGCAGTGACCCTTGGAGCTCCTCCAGTGGGATGA
 ATCAGCCTGGCTATGCAGGAATGTTGGGCAACTCTTCTCATATTCACAGTCCAGCAGCTACTGTAG
 CCTGCATCCACATGAACGTTTGAGCTATCCATCACACTCCTCAGCAGACATCAATTCCAGTCTTCCT
 CCGATGTCCACTTTCCATCGTAGTGGTACAAACCATTACAGCACCTCTTCCTGTACGCCTCCTGCCA
 ACGGGACAGACAGTATAATGGCAAATAGAGGAAGCGGGGAGCCGGCAGCTCCCAGACTGGAGATGC
 TCTGGGGAAAGCACTTGCTTCGATCTATTCTCCAGATCACACTAACAAACAGCTTTTCATCAAACCTT
 TCAACTCCTGTTGGCTCTCCTCCATCTCTCTCAGCAGGCACAGCTGTTTGGTCTAGAAATGGAGGAC
 AGGCCTCATCGTCTCCTAATTATGAAGGACCTTACACTCTTTGCAAAGCCGAATTGAAGATCGTTT
 AGAAAGACTGGATGATGCTATTCTGTTCTCCGGAACCATGCAGTGGGCCCATCCACAGCTATGCCT
 GGTGGTCAATGGGGACATGCATGGAATCATTGGACCTTCTCATAATGGAGCCATGGGTGGTCTGGGCT
 CAGGGTATGGAACCGGCTTCTTTTCAGCCAACAGACATTCATCATGGTGGGGACCCATCGTGAAGA
 TGGCGTGGCCCTGAGAGGCAGCCATTCCTTCTGCCAAACAGGTTCCGGTTCCACAGCTTCCTGTC
 CAGTCTGCGACTTCCCCTGACCTGAACCCACCCAGGACCTTACAGAGGCATGCCACCAGGACTAC
 AGGGGCAGAGTGTCTCCTCTGGCAGCTCTGAGATCAAAATCCGATGACGAGGGTGATGAGAACCTGCA
 AGACACGAAATCTTCGGAGGACAAGAAATTAGATGACGACAAGAAGGATATCAAATCAATTACTAGG
 TCAAGATCTAGCAATAATGACGATGAGGACCTGACACCAGAGCAGAAGGCAGAGCGTGAGAAGGAGC
 GGAGGATGGCCAACAATGCCCGAGAGCGTCTGCGGGTCCGTGACATCAACGAGGCTTTCAAAGAGCT
 CGGCCGATGGTGCAGCTCCACCTCAAGAGTGACAAGCCCCAGACCAAGCTCCTGATCCTCCACCAG
 GCGGTGGCCGTCATCCTCAGTCTGGAGCAGCAAGTCCGAGAAAGGAATCTGAATCCGAAAGCTGCGT
 GTCTGAAAAGAAGGGAGGAAGAGAAGGTGTCCTCAGAGCCTCCCCCTCTCTCCTTGCCCGGCCACA
 CCCTGGAATGGGAGACGCATCGAATCACATGGGACAGATGTAAActcgaggata

Features:

Name	Location	Length	Comment
artificial promoter	1-37	37	lowercase
minP minimal promoter	7-37	31	underlined
TCF4 coding sequence	38-2053	2016	uppercase

FIG. 4B

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Construct #3**Name of plasmid: ARN61****1 microE5 box + minP + TCF4 coding sequence (SEQ ID NO:6)**

gaattcaacacctgcaagagaggggtatataatggaagctcgacttccagATGCATCACCAACAGCGA
 ATGGCTGCCCTTAGGGACGGACAAAGAGCTGAGTGATTACTGGATTTCAGTGCGATGTTTTACCTC
 CTGTGAGCAGTGGGAAAAATGGACCAACTTCTTTGGCAAGTGGACATTTTACTGGCTCAAATGTAGA
 AGACAGAAGTAGCTCAGGGTCTGGGGGAATGGAGGACATCCAAGCCCGTCCAGGAATATGGAGAT
 GGGACTCCCTATGACCACATGACCAGCAGGGACCTTGGGTACATGACAATCTCTCTCCACCTTTTG
 TCAATTCCAGAATACAAAGTAAAACAGAAAGGGGCTCATACTCATCTTATGGGAGAGAATCAAACCT
 ACAGGGTTGCCACCAGCAGAGTCTCCTTGGAGGTGACATGGATATGGGCAACCCAGGAACCTTTTCG
 CCCACCAAACCTGGTTCCAGTACTATCAGTATTCTAGCAATAATCCCCGAAGGAGGCCTCTTCACA
 GTAGTGCCATGGAGGTGCAGACAAAGAAAGTTGAAAAGTTTCTCCAGGTTTGCCATCTTCAGTCTA
 TGCTCCATCAGCAAGCACTGCCGACTACAATAGGGACTCGCCAGGCTATCCTTCTCCAAACCAGCA
 ACCAGCACTTTCCCTAGCTCCTTCTTCATGCAAGATGGCCATCACAGCAGTGACCTTTGGAGCTCCT
 CCAGTGGGATGAATCAGCCTGGCTATGCAGGAATGTTGGGCAACTCTTCTCATATTCACAGTCCAG
 CAGCTACTGTAGCCTGCATCCACATGAACGTTTGGAGCTATCCATCACACTCCTCAGCAGACATCAAT
 TCCAGTCTTCCCTCCGATGTCCACTTTCATCGTAGTGGTACAAACCATTACAGCACCTCTTCCTGTA
 CGCCTCCTGCCAACGGGACAGACAGTATAATGGCAAATAGAGGAAGCGGGGAGCCGGCAGCTCCCA
 GACTGGAGATGCTCTGGGAAAGCACTTGCTTCGATCTATTCTCCAGATCACACTAACAACAGCTTT
 TCATCAAACCCCTTCAACTCCTGTTGGCTCTCCTCCATCTCTCTCAGCAGGCACAGCTGTTTGGTCTA
 GAAATGGAGGACAGGCCTCATCGTCTCCTAATTATGAAGGACCCTTACACTCTTTGCAAAGCCGAAT
 TGAAGATCGTTTAGAAAGACTGGATGATGCTATTTCATGTTCTCCGGAACCATGCAGTGGGCCCATCC
 ACAGCTATGCTGCTGGTGGTTCATGGGGACATGCATGGAATCATTGGACCTTCTCATATGGAGCCATGG
 GTGGTCTGGGCTCAGGGTATGGAACCGGCCTTCTTTTCAGCCAACAGACATTCATCATGGTGGGGAC
 CCATCGTGAAGATGGCGTGGCCCTGAGAGGCAGCCATTCTCTTCTGCCAAACCAGGTTCCGGTTCCA
 CAGCTTCTGTCCAGTCTGCGACTTCCCCTGACCTGAACCCACCCAGGACCCTTACAGAGGCATGC
 CACCAGGACTACAGGGGACAGTGTCTCCTCTGGCAGCTCTGAGATCAAATCCGATGACGAGGGTGA
 TGAGAACCTGCAAGACACGAAATCTTCGAGGACAAAGAAATTAGATGACGACAAGAAGGATATCAAA
 TCAATTACTAGGTCAAGATCTAGCAATAATGACGATGAGGACCTGACACCAGAGCAGAAGGCAGAGC
 GTGAGAAGGAGCGGAGGATGGCCAACAATGCCCCGAGAGCGTCTGCGGGTCCGTGACATCAACGAGGC
 TTTCAAAGAGCTCGGCCGCATGGTGCAGCTCCACCTCAAGAGTGACAAGCCCCAGACCAAGCTCCTG
 ATCCTCCACCAGGCGGTGGCCGTATCCTCAGTCTGGAGCAGCAAGTCCGAGAAAGGAATCTGAATC
 CGAAAGCTGCGTGTCTGAAAAGAAGGGAGGAAGAGAAGGTGTCTCAGAGCCTCCCCCTCTCTCCTT
 GGCCGGCCACACCCCTGGAATGGGAGACGCATCGAATCACATGGGACAGATGTAAActcgaggata

Features:

Name	Location	Length	Comment
artificial promoter	1-49	49	lowercase
microE5 box	9-14	6	
minP minimal promoter	19-49	31	underlined
TCF4 coding sequence	50-2065	2016	uppercase

FIG. 4C

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Construct #4**Name of plasmid: ARN62****3 microE5 boxes + minP + TCF4 coding sequence (SEQ ID NO:7)**

gaattcaacacctgcaagaacacctgcaagaacacctgcaagagagggtatataatggaagctcgac
 ttccagATGCATCACCAACAGCGAATGGCTGCCTTAGGGACGGACAAAGAGCTGAGTGATTTACTGG
 ATTTTCAGTGCATGTTTTTACCTCCTGTGAGCAGTGGGAAAAATGGACCAACTTCTTTGGCAAGTGG
 ACATTTTACTGGCTCAAATGTAGAAGACAGAAGTAGCTCAGGGTCTGGGGGAATGGAGGACATCCA
 AGCCCGTCCAGGAATATGGAGATGGGACTCCCTATGACCACATGACCAGCAGGGACCTTGGGTCAC
 ATGACAATCTCTCTCCACCTTTTGTCAATTCAGAATACAAAGTAAACAGAAAGGGGCTCATACTC
 ATCTTATGGGAGAGAATCAAACCTTACAGGGTTGCCACCAGCAGAGTCTCCTTGGAGGTGACATGGAT
 ATGGGCAACCCAGGAACCTTTTCGCCACCAAACCTGGTTCCAGTACTATCAGTATTCTAGCAATA
 ATCCCCGAAGGAGGCCTCTTCACAGTAGTGCCATGGAGGTGCAGACAAAAGAAAGTTCGAAAAGTCC
 TCCAGGTTTGGCATCTTCAGTCTATGCTCCATCAGCAAGCACTGCCGACTACAATAGGGGACTCGCCA
 GGCTATCCTTCCTCCAAACCAGCAACCAGCACTTTCCTTAGCTCCTTCTTCATGCAAGATGGCCATC
 ACAGCAGTGACCCCTTGGAGCTCCTCCAGTGGGATGAATCAGCCTGGCTATGCAGGAATGTTGGGCAA
 CTCTTCTCATATTCCACAGTCCAGCAGCTACTGTAGCCTGCATCCACATGAACGTTTGAGCTATCCA
 TCACACTCCTCAGCAGACATCAATTCCAGTCTTCCCTCCGATGTCCACTTTCCATCGTAGGTGATCAA
 ACCATTACAGCACCTCTTCTGTACGCCTCCTGCCAACGGGACAGACAGTATAATGGCAAATAGAGG
 AAGCGGGGACGCCGAGCTCCAGACTGGAGATGCTCTGGGGAAAGCACTTGCTTCGATCTATTCT
 CCAGATCACACTAACACAGCTTTTCATCAAACCTTCAACTCCTGTTGGCTCTCCTCCATCTCTCT
 CAGCAGGCACAGCTGTTTGGTCTAGAAATGGAGGACAGGCCTCATCGTCTCCTAATTATGAAGGACC
 CTTACACTCTTTGCAAAGCCGAATTGAAGATCGTTTAGAAAGACTGGATGATGCTATTCTATGTTCTC
 CGGAACCATGCAGTGGGCCCATCCACAGCTATGCCTGGTGGTTCATGGGGACATGCATGGAATCATTG
 GACCTTCTCATAATGGAGCCATGGGTGGTCTGGGCTCAGGGTATGGAACCGGCCTTCTTTTCAGCCAA
 CAGACATTCACCTCATGGTGGGGACCCATCGTGAAGATGGCGTGGCCCTGAGAGGCAGCCATTCTCTT
 CTGCCAAACCAGGTTCCGGTTCCACAGCTTCTGTCCAGTCTGCGACTTCCCCTGACCTGAACCCAC
 CCCAGGACCCTTACAGAGGCATGCCACCAGGACTACAGGGGACAGTGTCTCCTCTGGCAGCTCTGA
 GATCAAATCCGATGACGAGGGTGATGAGAACCCTGCAAGACACGAAATCTTCGGAGGACAAGAAATTA
 GATGACGACAAGAAGGATATCAAATCAATTACTAGGTCAAGATCTAGCAATAATGACGATGAGGACC
 TGACACCAGAGCAGAAGGCAGAGCGTGAGAAGGAGCGGAGGATGGCCAACAATGCCCGAGAGCGTCT
 GCGGGTCCGTGACATCAACGAGGCTTTCAAAGAGCTCGGCCGATGGTGCAGCTCCACCTCAAGAGT
 GACAAGCCCCAGACCAAGCTCCTGATCCTCCACCAGGCGGTGGCCGTCATCCTCAGTCTGGAGCAGC
 AAGTCCGAGAAAGGAATCTGAATCCGAAAGCTGCGTGTCTGAAAAGAAGGGAGGAAGAGAAGGTGTC
 CTCAGAGCCTCCCCCTCTCTCCTTGGCCGGCCACACCCTGGAATGGGAGACGCATCGAATCACATG
 GGACAGATGTAAActcgaggata

Features:

Name	Location	Length	Comment
artificial promoter	1-73	73	lowercase
microE5 box	9-14	6	
microE5 box	21-26	6	
microE5 box	33-38	6	
minP minimal promoter	43-73	31	underlined
TCF4 coding sequence	74-2089	2016	uppercase

FIG. 4D

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Construct #5**Name of plasmid: ARN63****6 microE5 boxes + minP + TCF4 coding sequence (SEQ ID NO:8)**

gaattcaacacctgcaagaacacctgcaagaacacctgcaagaacacctgcaagaacacctgcaaga
 acacctgcaagagaggggtatataatggaagctcgacttccagATGCATCACCAACAGCGAATGGCTG
 CCTTAGGGACGGACAAAAGAGCTGAGTGATTTACTGGATTTTCAGTGCGATGTTTTACCTCCTGTGAG
 CAGTGGGAAAAATGGACCAACTTCTTTGGCAAGTGGACATTTTACTGGCTCAAATGTAGAAGACAGA
 AGTAGCTCAGGGTCTTGGGGGAATGGAGGACATCCAAGCCCGTCCAGGAAGTATGGAGATGGGACTC
 CCTATGACCACATGACCAGCAGGGACCTTGGGTACATGACAATCTCTCTCCACCTTTTGTCAATTC
 CAGAATACAAAGTAAACAGAAAGGGGCTCATACTCATCTTATGGGAGAGAATCAAACCTTACAGGGT
 TGCCACCAGCAGAGTCTCCTTGGAGGTGACATGGATATGGGCAACCCAGGAACCTTTGCCCCACCA
 AACCTGGTTCACAGTACTATCAGTATTCTAGCAATAATCCCCGAAGGAGGCCTCTTCACAGTAGTGC
 CATGGAGGTGCAGACAAAGAAAGTTTCGAAAAGTTCCCTCCAGGTTTGCCATCTTCAGTCTATGCTCCA
 TCAGCAAGCACTGCCGACTACAATAGGGACTCGCCAGGCTATCCTTCCTCCAAACCAGCAACCAGCA
 CTTTCCCTAGCTCCTTCTTCATGCAAGATGGCCATCACAGCAGTGACCTTGGAGTCTCTCCAGTGG
 GATGAATCAGCTCGCTATGCAGGAATGTTGGGCAACTCTTCTCATATTCACAGTCCAGCAGCTAC
 TGTAGCCTGACATCCACATGAACGTTTGAGCTATCCATCACACTCCTCAGCAGACATCAATCCAGTC
 TTCCTCCGATGTCCACTTTCATCGTAGTGGTACAAACCATACAGCACCTCTTCTGTACGCTCC
 TGCCAACGGGACAGACAGTATAATGGCAAATAGAGGAAGCGGGGAGCCGGCAGCTCCAGACTGGA
 GATGCTCTGGGAAAGCACTTGCTTCGATCTATTCTCCAGATCACACTAACAACAGCTTTTCATCAA
 ACCCTTCAACTCCTGTTGGCTCTCCTCCATCTCTCTCAGCAGGCACAGCTGTTTGGTCTAGAAATGG
 AGGACAGGCCTCATCGTCTCCTAATTATGAAGGACCCTTACACTCTTTGCAAAGCCGAATTGAAGAT
 CGTTTAGAAAGACTGGATGATGCTATTCTCATGTTCTCCGGAACCATGCAGTGGGCCCATCCACAGCTA
 TGCCTGGTGGTTCATGGGGACATGCATGGAATCATTTGGACCTTCTCATAATGGAGCCATGGGTGGTCT
 GGGCTCAGGGTATGGAACCGGCCTTCTTTCAGCCAACAGACATTCATCATGGTGGGGACCATCGT
 GAAGATGGCGTGGCCCTGAGAGGCAGCCATTCTCTTCTGCCAAACCAGGTTCCGGTTCCACAGCTTC
 CTGTCCAGTCTGCGACTTCCCCTGACCTGAACCCACCCAGGACCCTTACAGAGGCATGCCACCAGG
 ACTACAGGGGCAGAGTGTCTCCTCTGGCAGCTCTGAGATCAAATCCGATGACGAGGTGATGAGAAC
 CTGCAAGACACGAAATCTTCGGAGGACAAGAAATTAGATGACGACAGAAGGATATCAAATCAATTA
 CTAGGTCAAGATCTAGCAATAATGACGATGAGGACCTGACACCAGAGCAGAAGGCAGAGCGTGAGAA
 GGAGCGGAGGATGGCCAACAATGCCCAGAGCGTCTGCGGGTCCGTGACATCAACGAGGCTTTCAAA
 GAGCTCGGCGCATGGTGCAGCTCCACCTCAAGAGTGACAAGCCCCAGACCAAGCTCCTGATCCTCC
 ACCAGGCGGTGGCCGTATCCTCAGTCTGGAGCAGCAAGTCCGAGAAAGGAATCTGAATCCGAAAGC
 TGCGTGTCTGAAAAGAAGGAGGAAGAGAAGGTGTCTCAGAGCCTCCCCCTCTCTCTTGGCCGGC
 CCACACCTTGAATGGGAGAGCATCGAATCACATGGGACAGATGTAAActcgaggata

Features:

Name	Location	Length	Comment
artificial promoter	1-109	109	lowercase
microE5 box	9-14	6	
microE5 box	21-26	6	
microE5 box	33-38	6	
microE5 box	45-50	6	
microE5 box	57-62	6	
microE5 box	69-74	6	
minP minimal promoter	79-109	31	underlined
TCF4 coding sequence	110-2125	2016	uppercase

FIG. 4E

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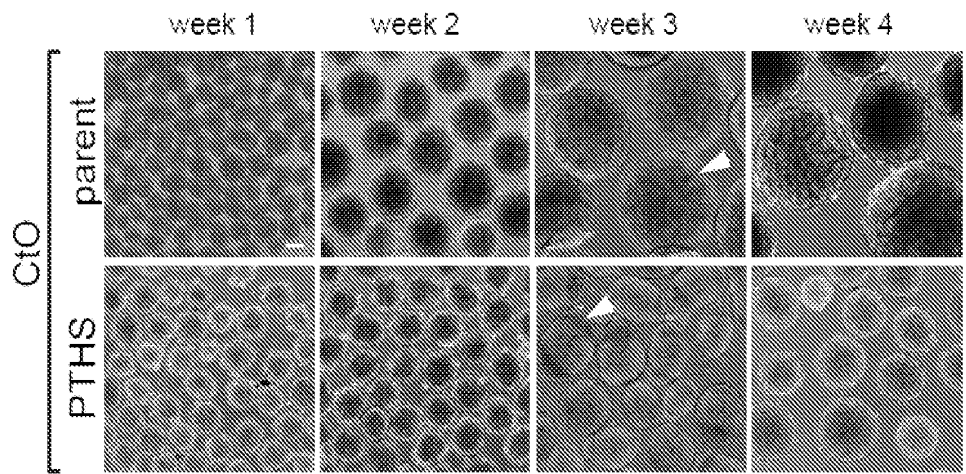


FIG. 5A

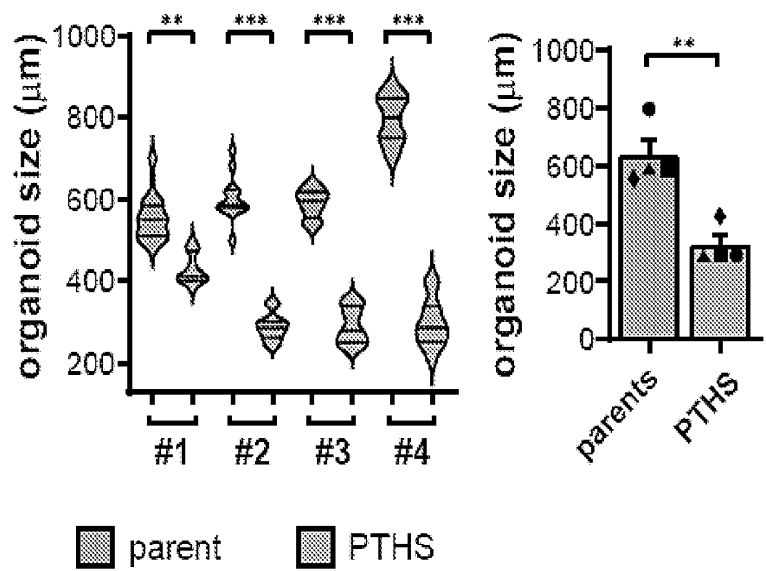


FIG. 5B

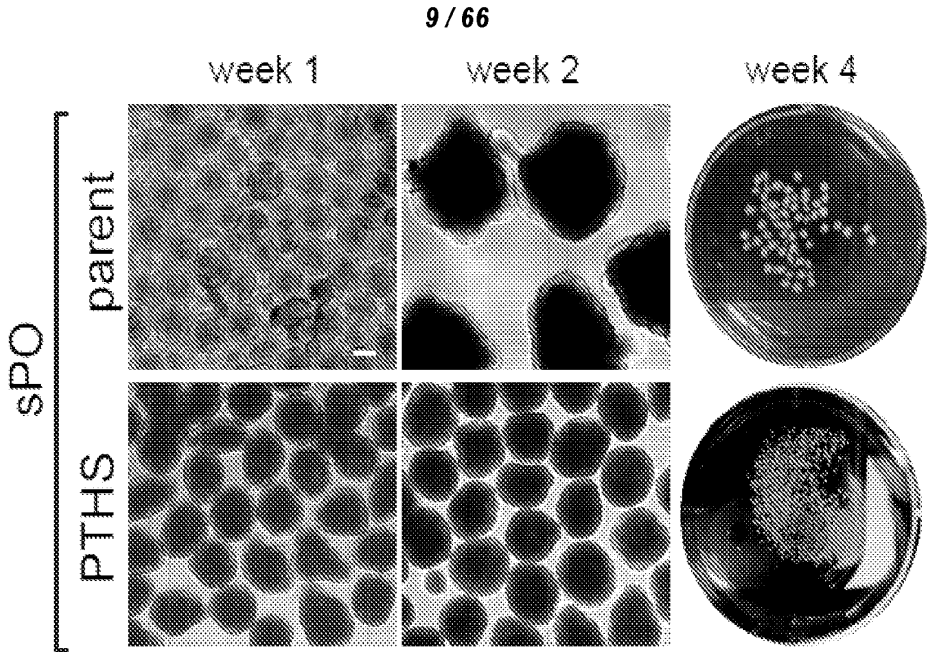


FIG. 5C

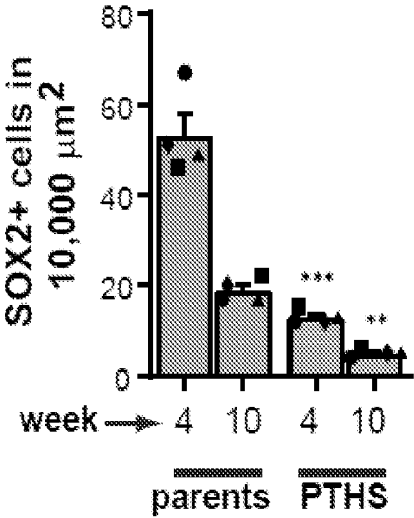


FIG. 5D

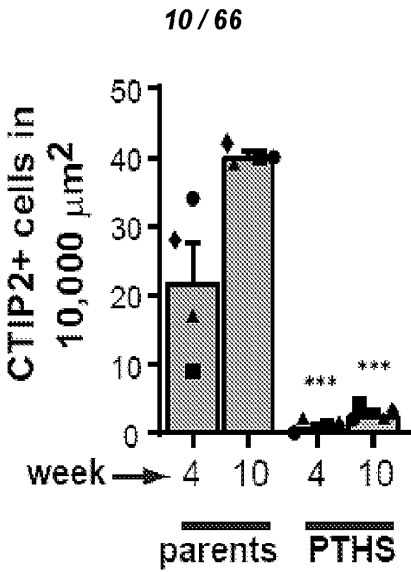


FIG. 5E

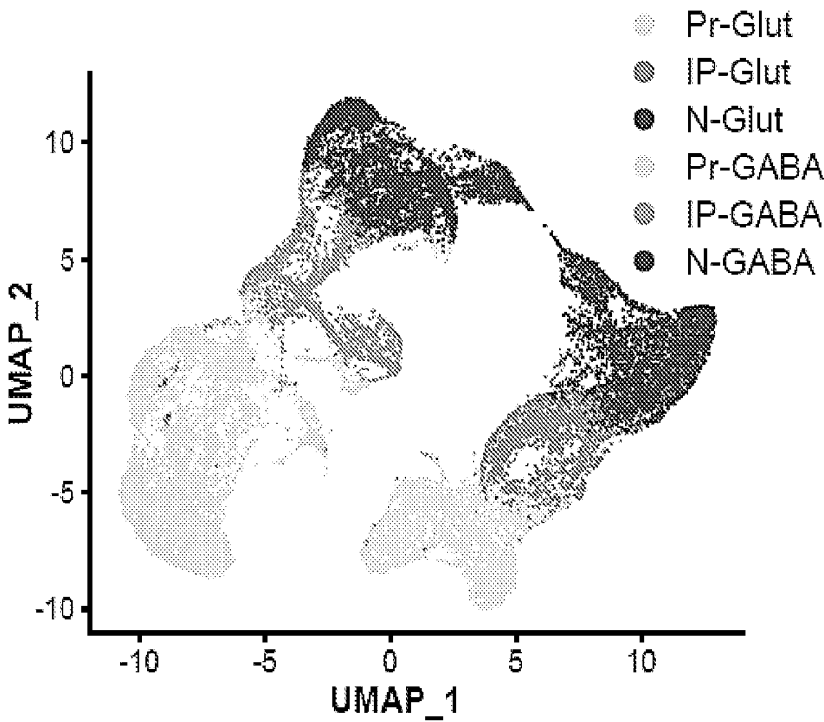


FIG. 6A

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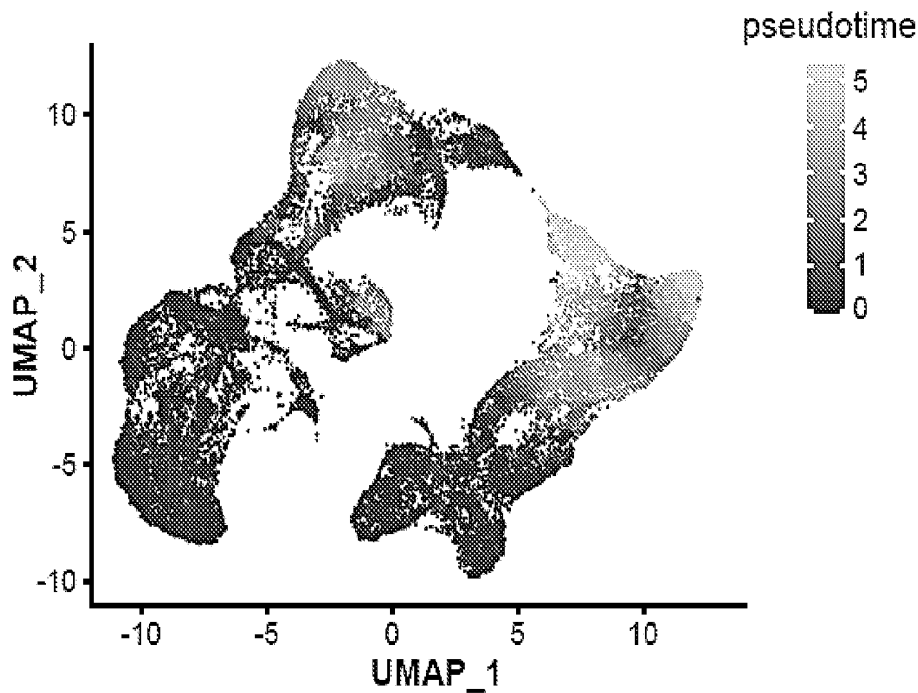


FIG. 6B

CtOs

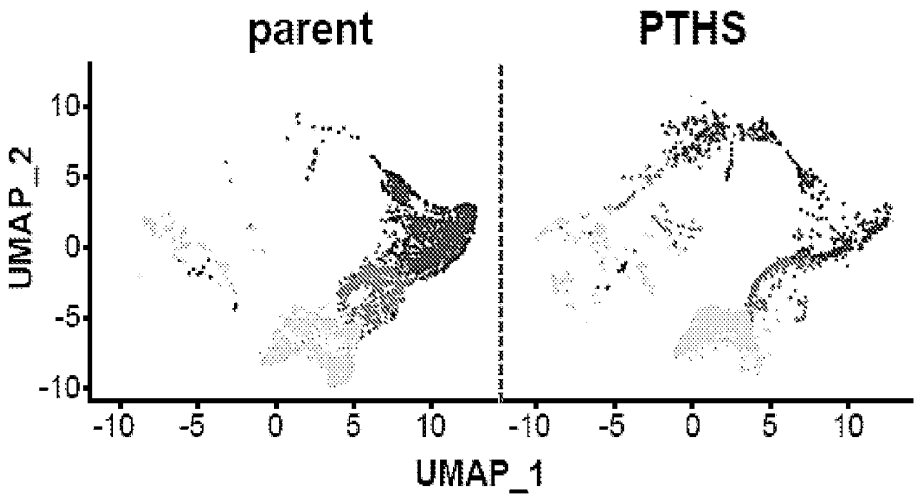


FIG. 6C

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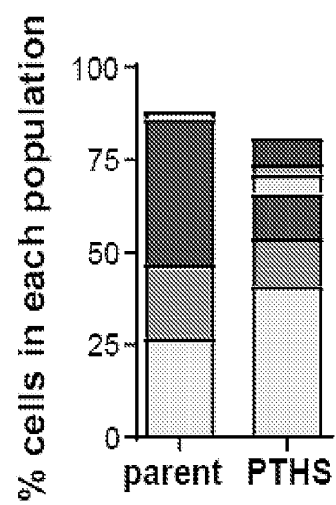


FIG. 6D

SOX2 in Pr-Glut

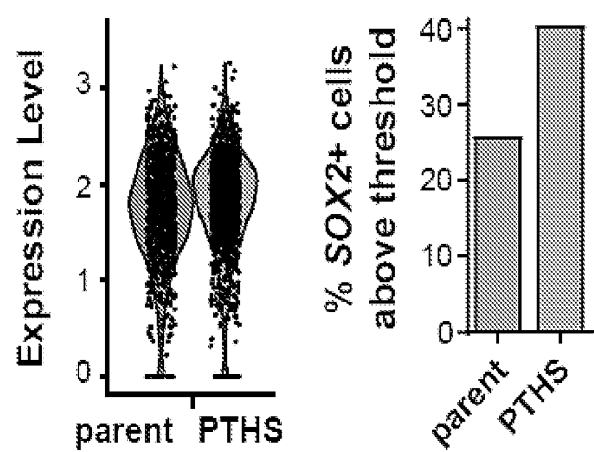


FIG. 6E

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sPOs

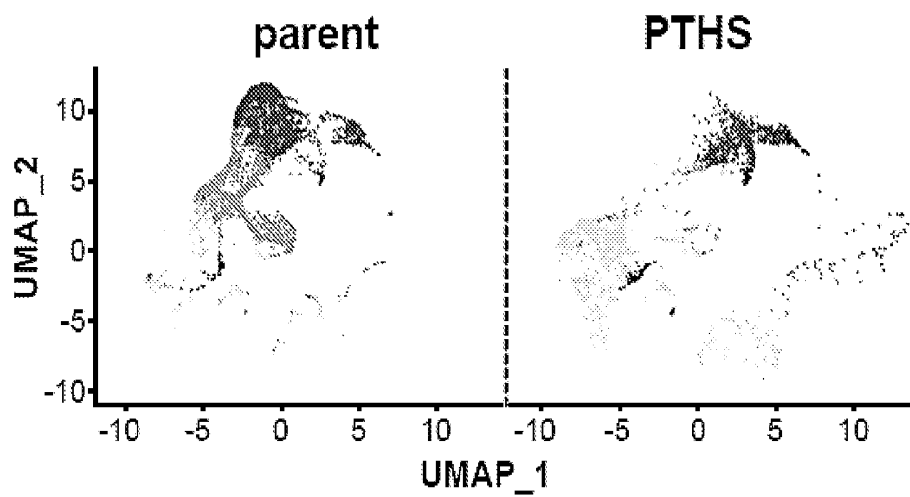


FIG. 6F

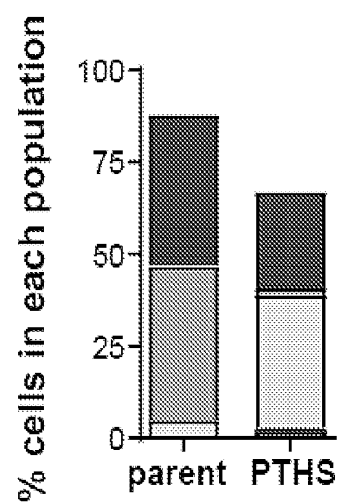


FIG. 6G

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SOX2 in Pr-GABA

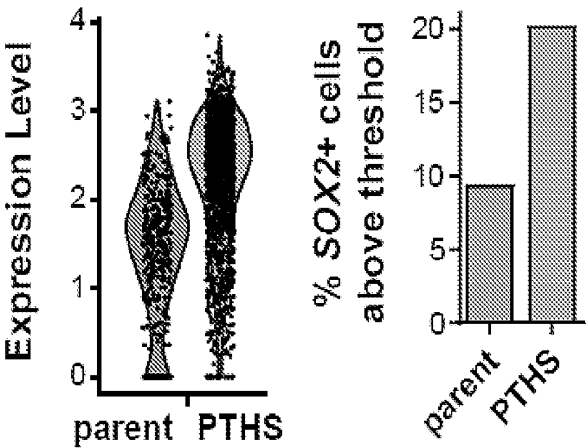
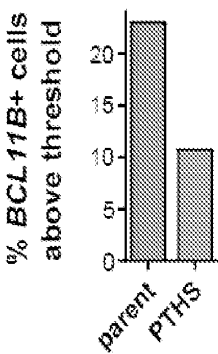
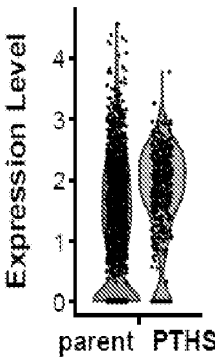


FIG. 6H

BCL11B (CTIP2)
in N-Glut (in CtOs)



SATB2 in
N-Glut (in CtOs)

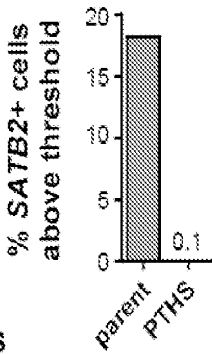
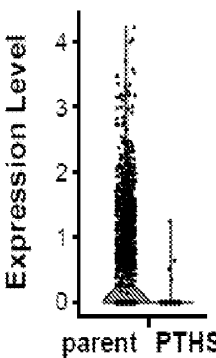


FIG. 6I

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GAD2 in
N-GABA (in sPOs)

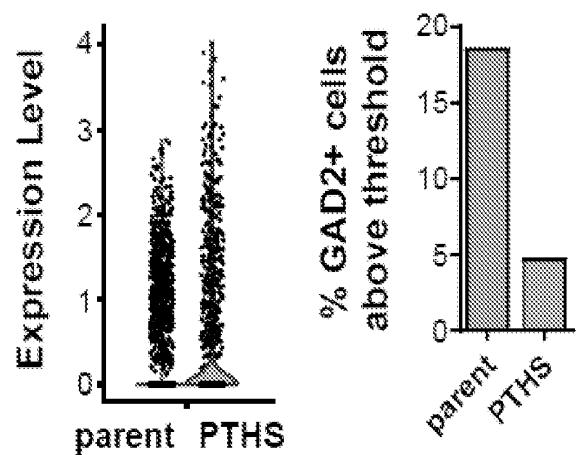


FIG. 6J

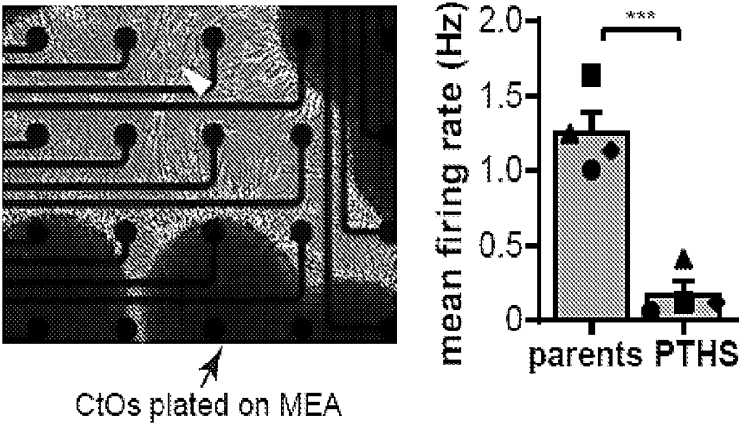


FIG. 7A

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neurons (2D culture)

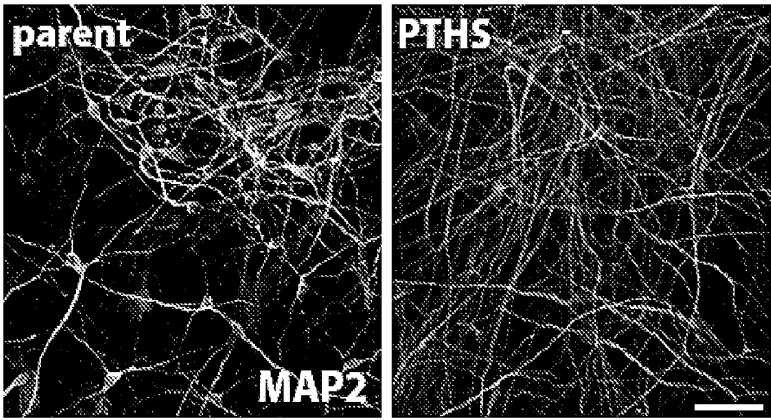


FIG. 7B

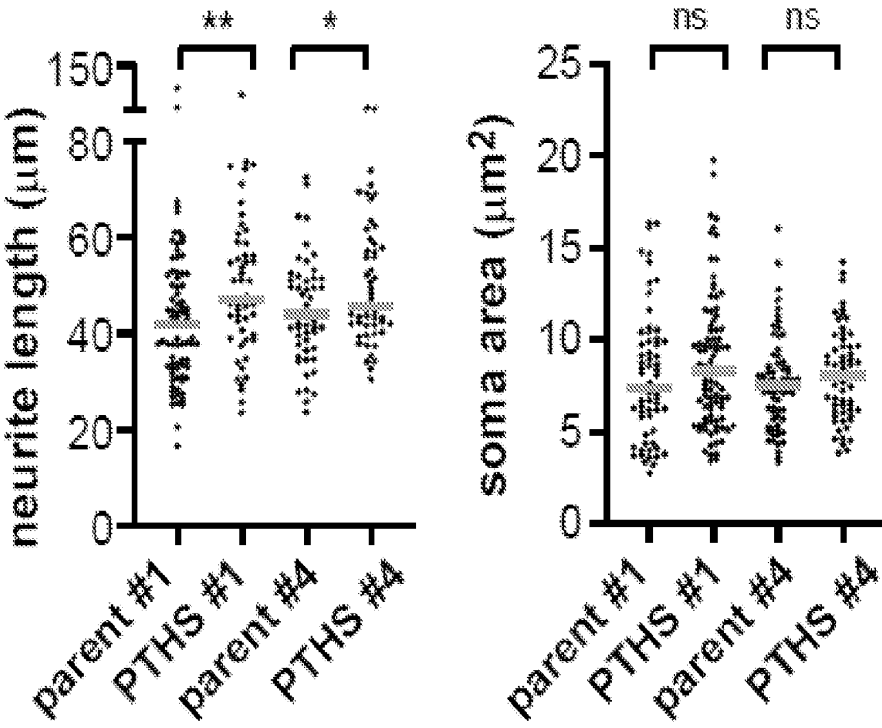


FIG. 7C

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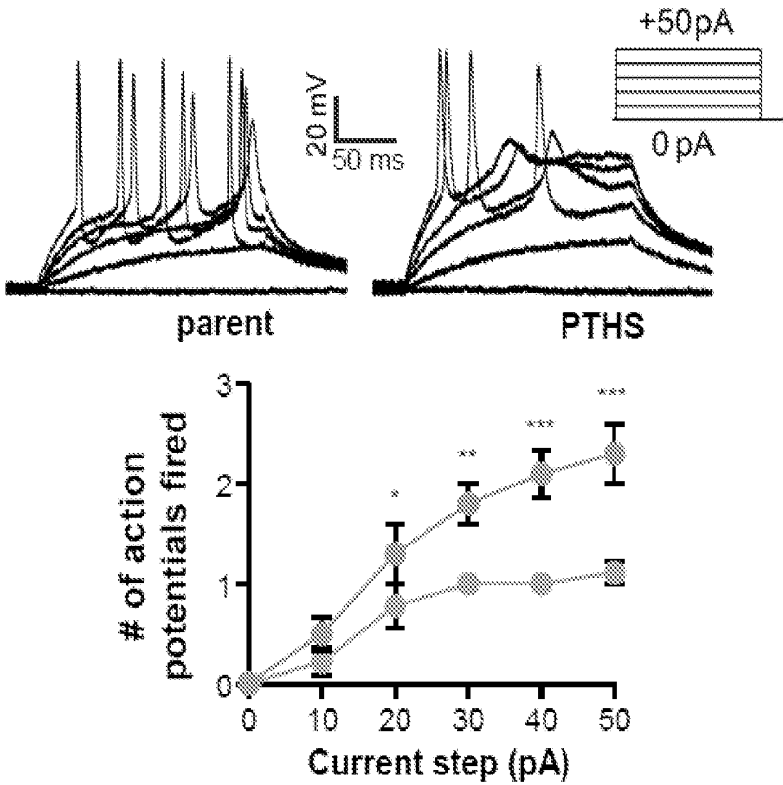


FIG. 7D

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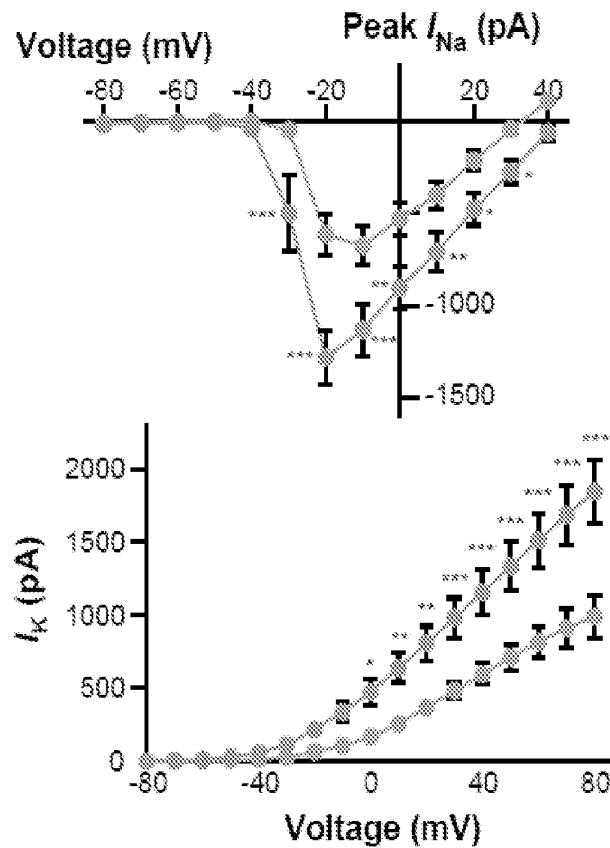


FIG. 7E

FOS in N-Glut (in CtOs)

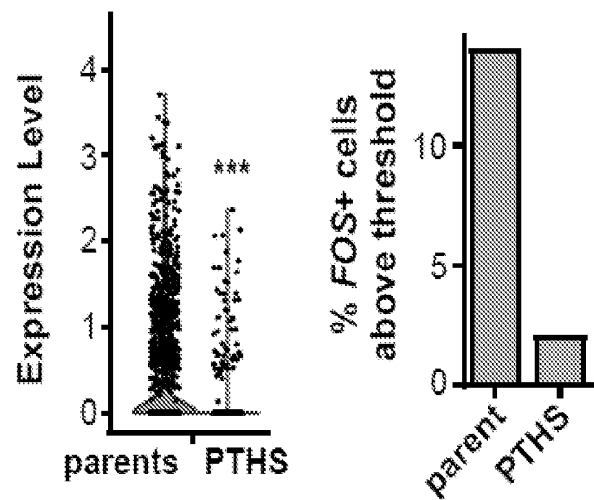


FIG. 7F

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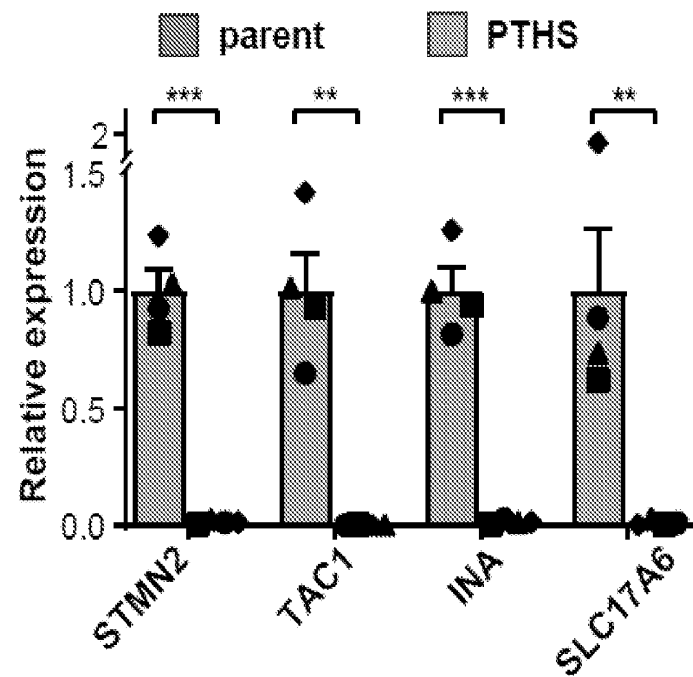


FIG. 7G

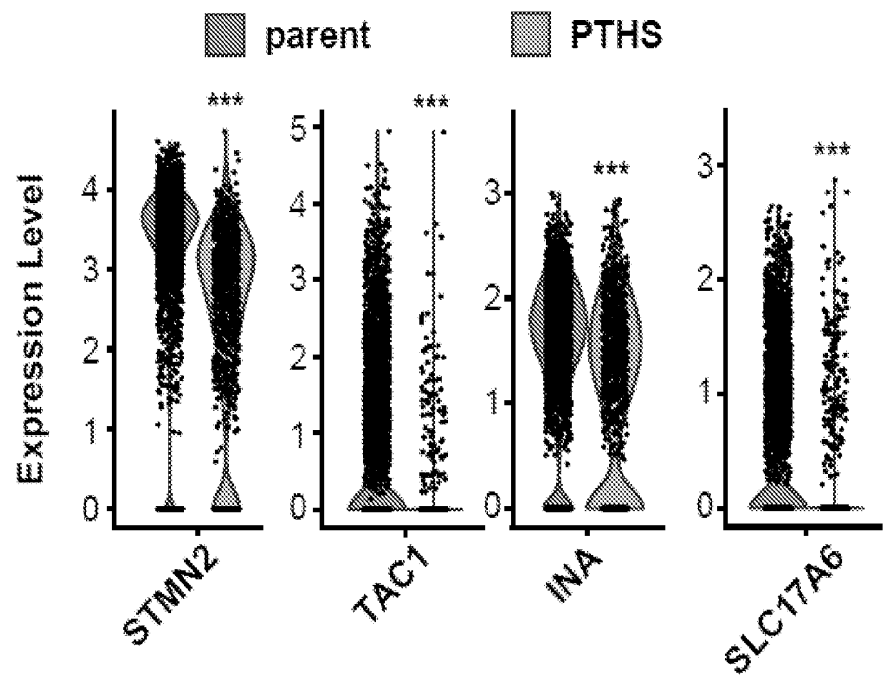


FIG. 7H

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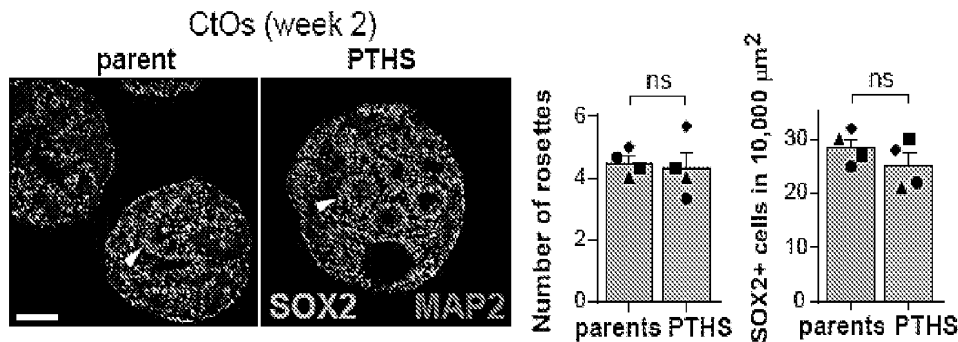


FIG. 8A

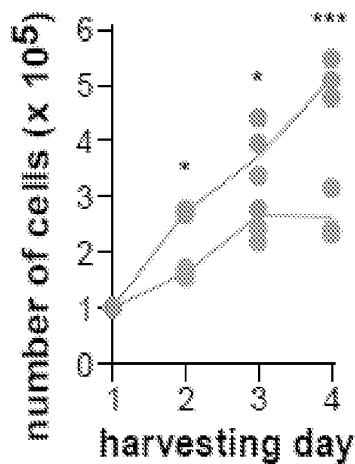


FIG. 8B

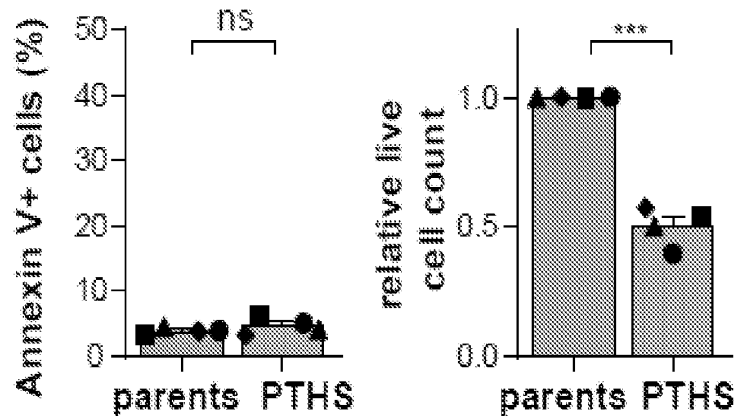


FIG. 8C

FIG. 8D

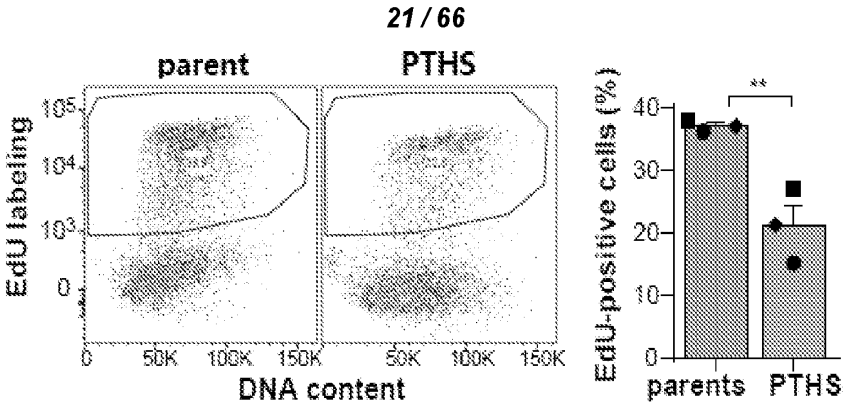


FIG. 8E

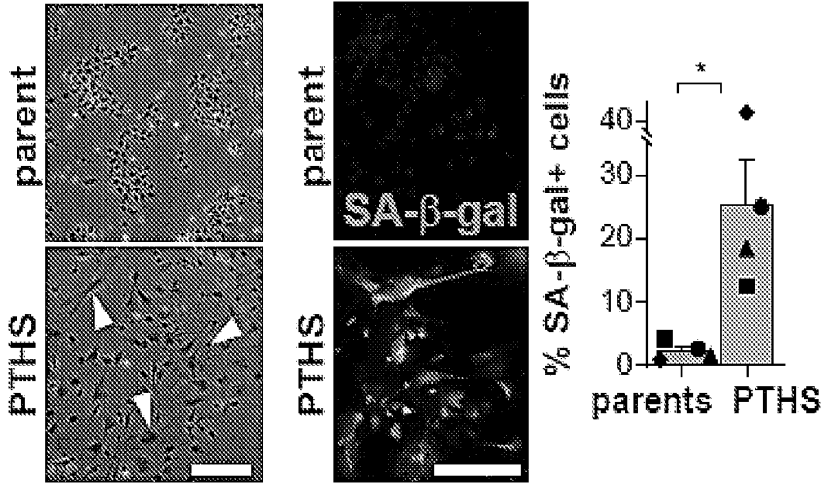


FIG. 8F

FIG. 8G

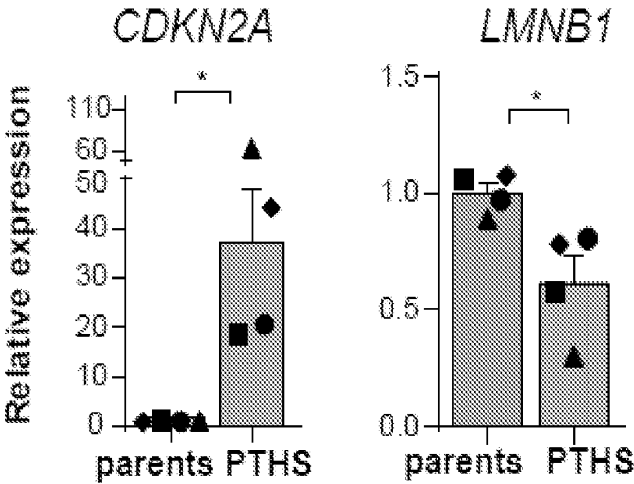


FIG. 8H

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CDKN2A in
post-mortem sample

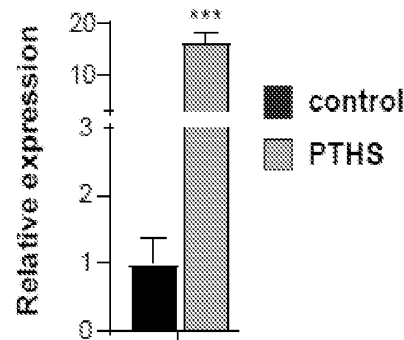


FIG. 8I

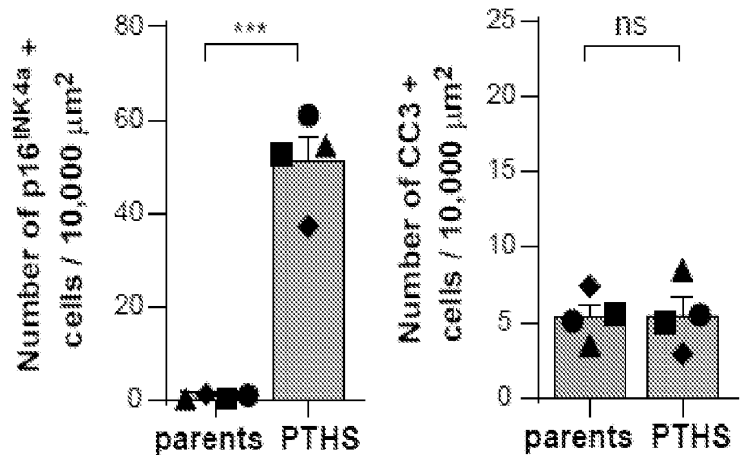


FIG. 8J

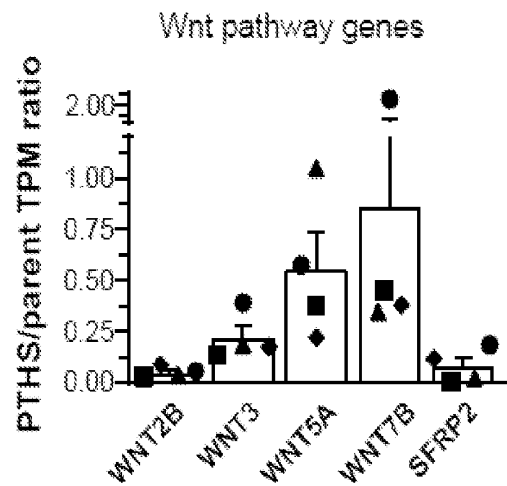


FIG. 9A

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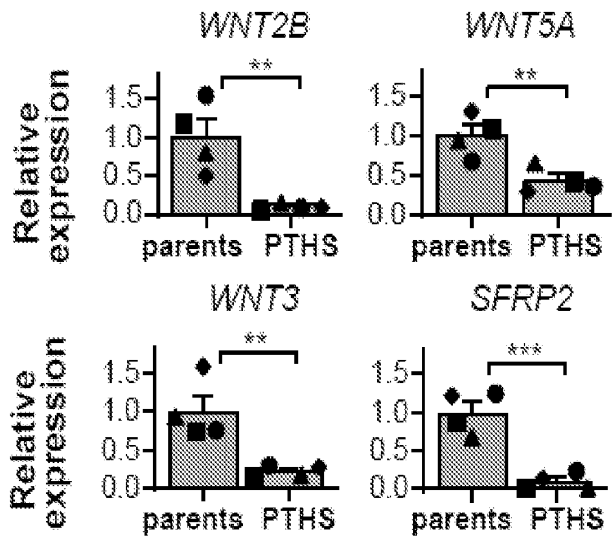


FIG. 9B

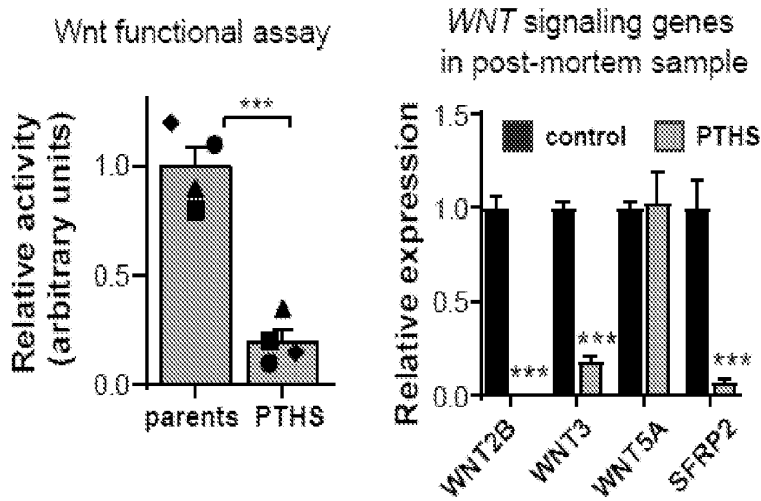


FIG. 9C

FIG. 9D

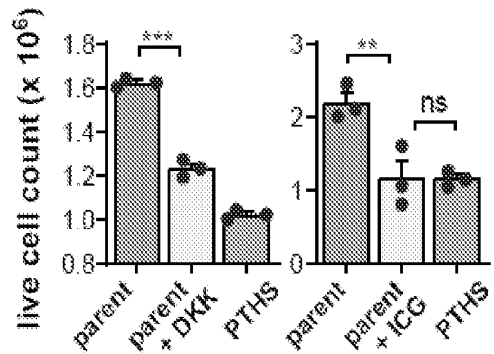


FIG. 9E

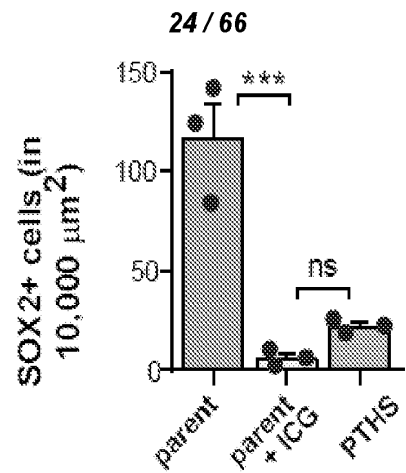


FIG. 9F

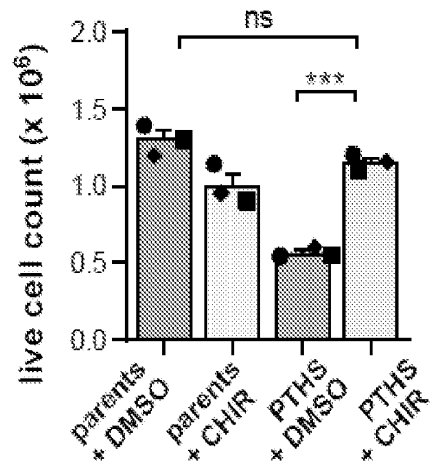


FIG. 9G

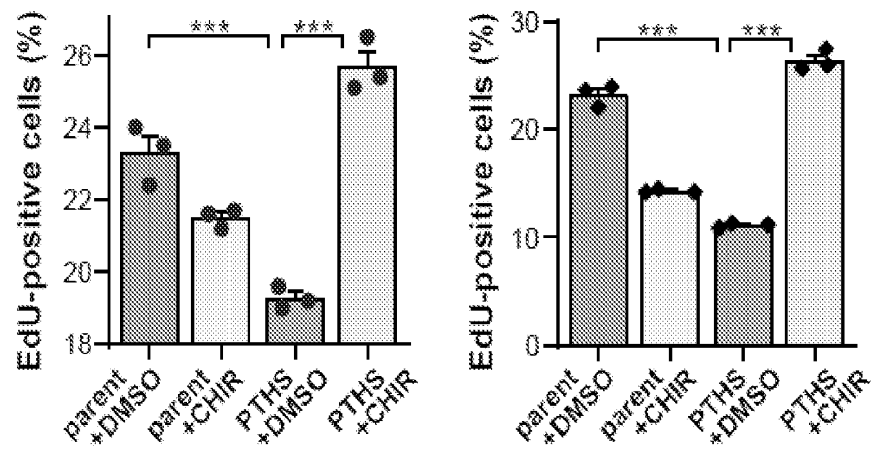


FIG. 9H

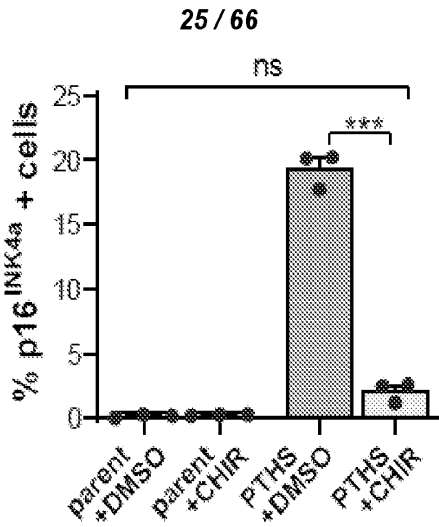


FIG. 9I

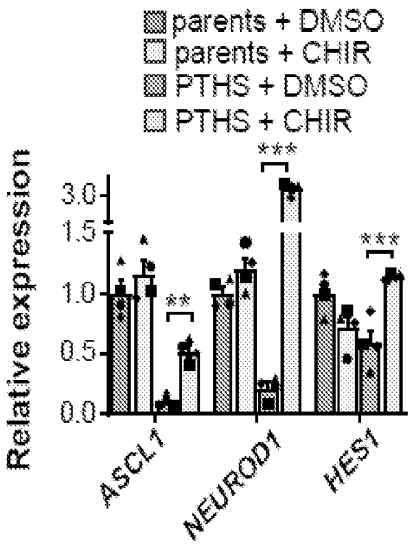


FIG. 9J

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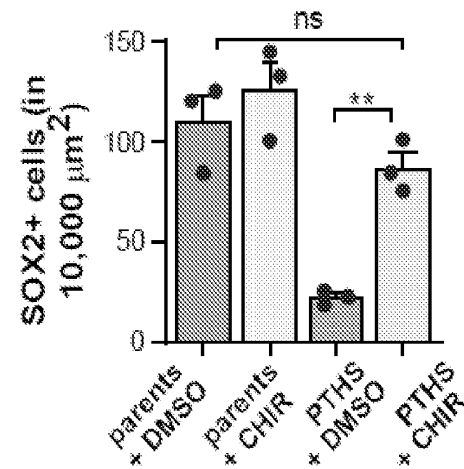


FIG. 9K

SOX genes in progenitors

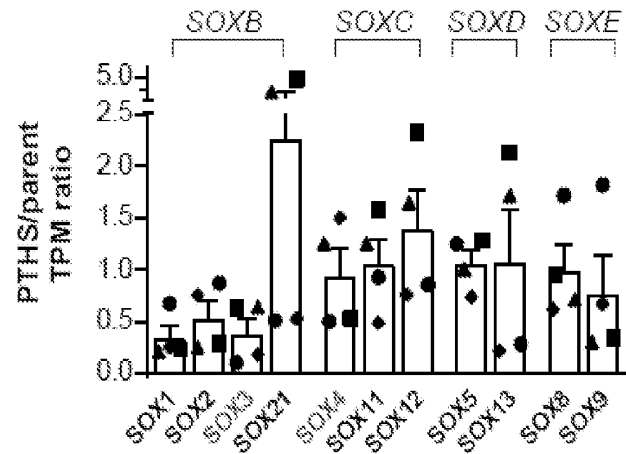
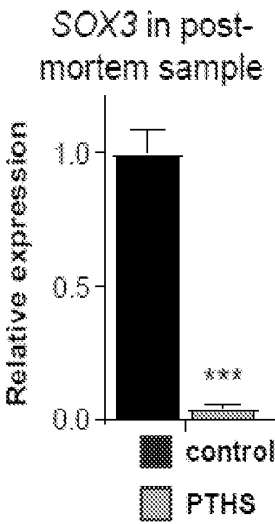
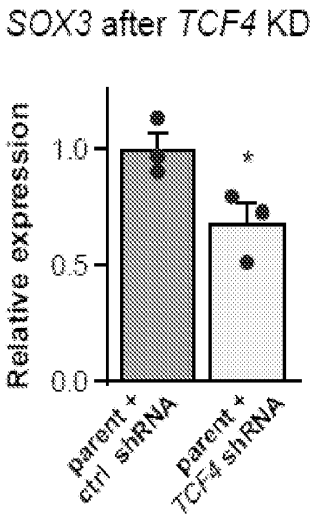
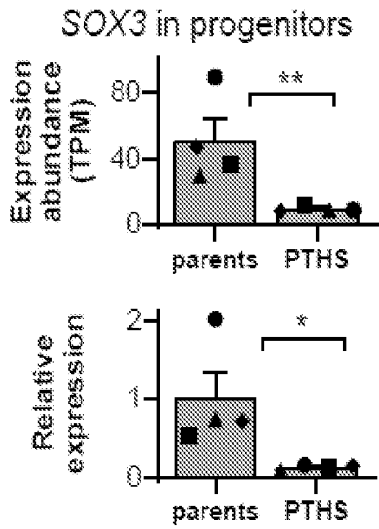


FIG. 10A



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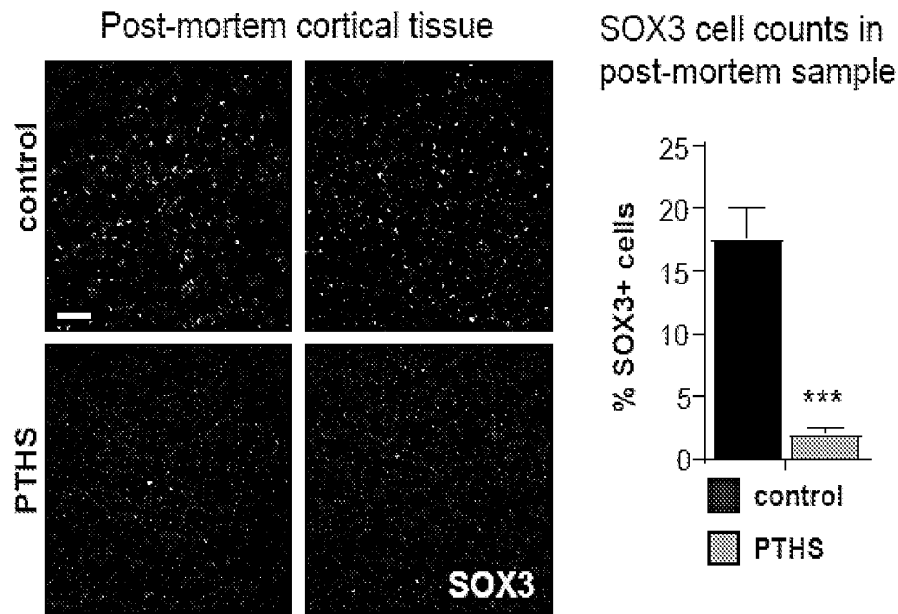


FIG. 10E

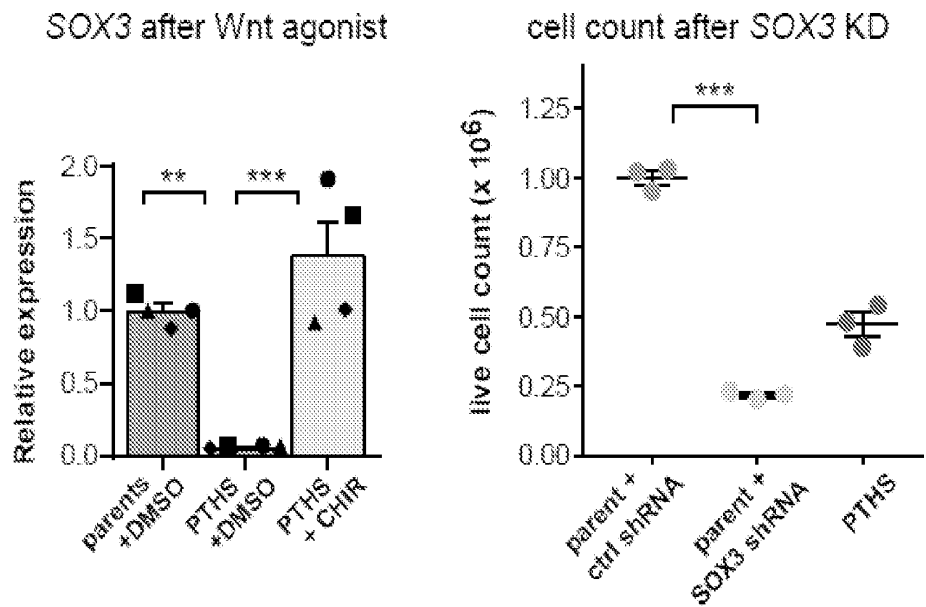
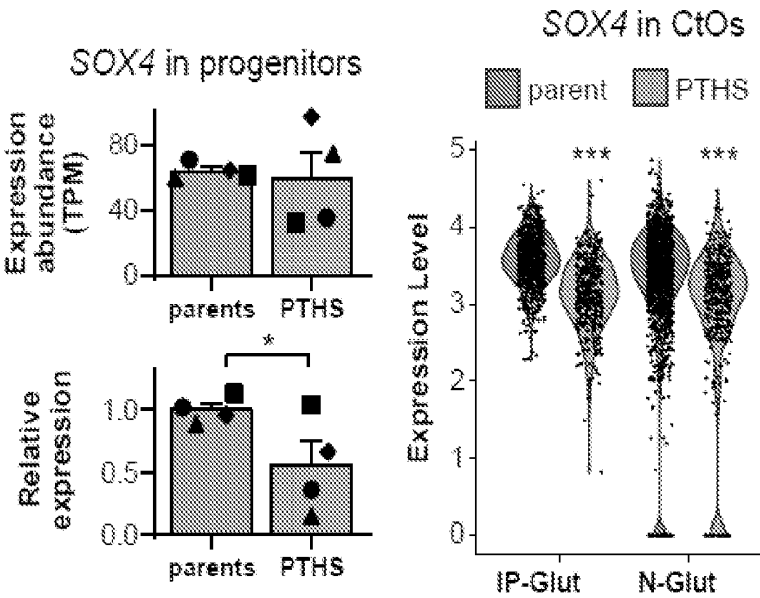
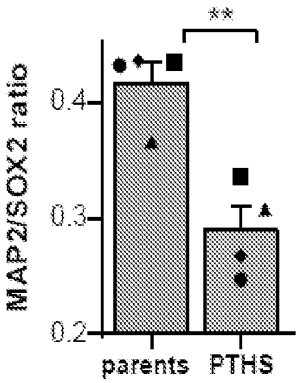


FIG. 10F

FIG. 10G



MAP2/SOX2
ratio in neurons



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cell counts
after SOX4 KD

qPCR after
SOX4 KD

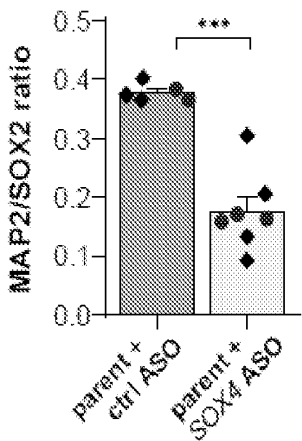


FIG. 10K

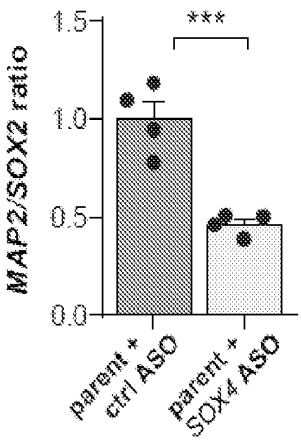


FIG. 10L

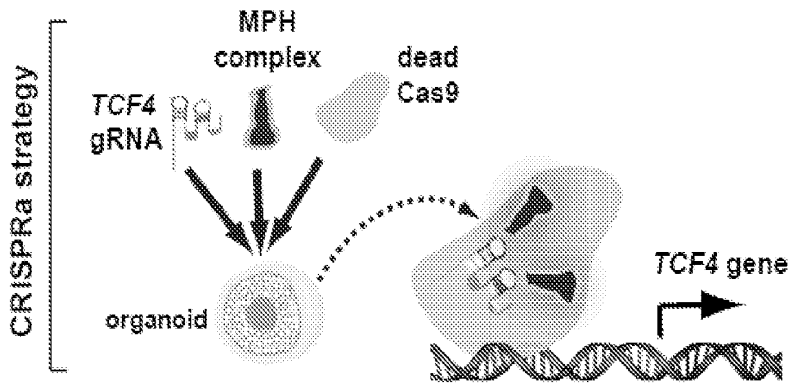


FIG. 11A

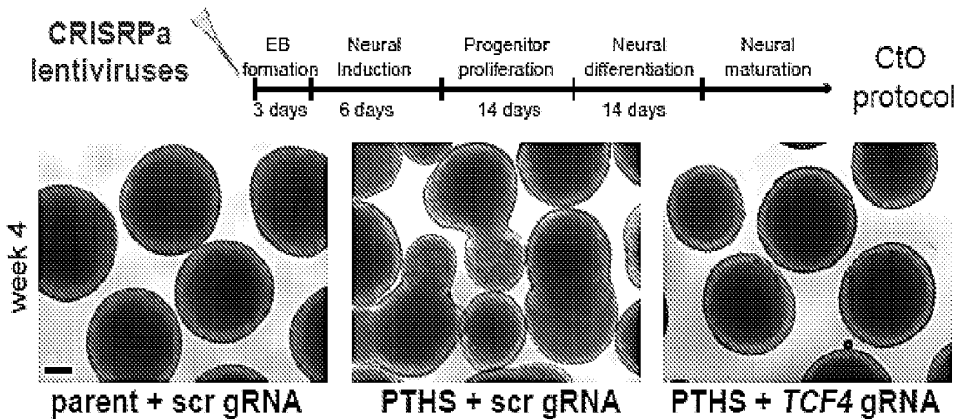


FIG. 11B

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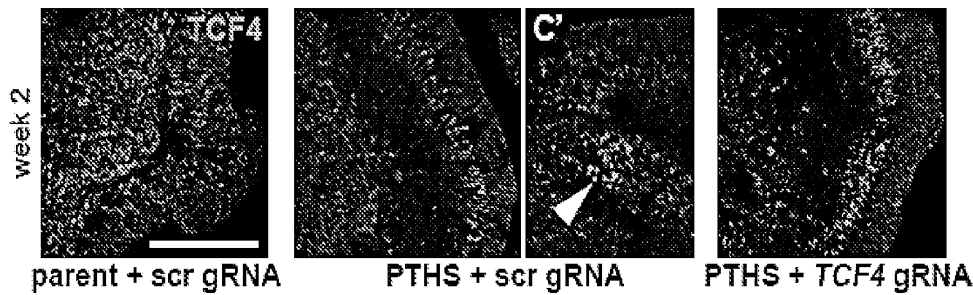


FIG. 11C

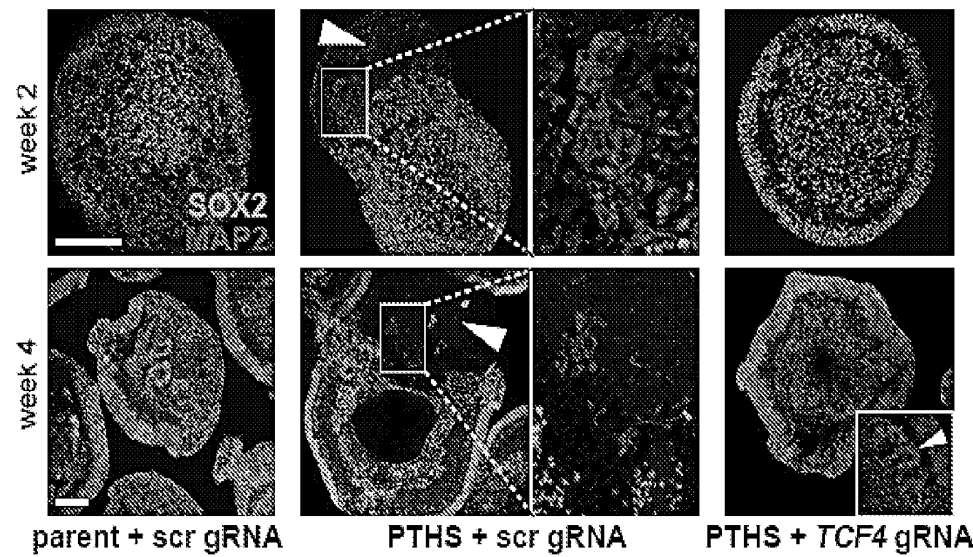


FIG. 11D

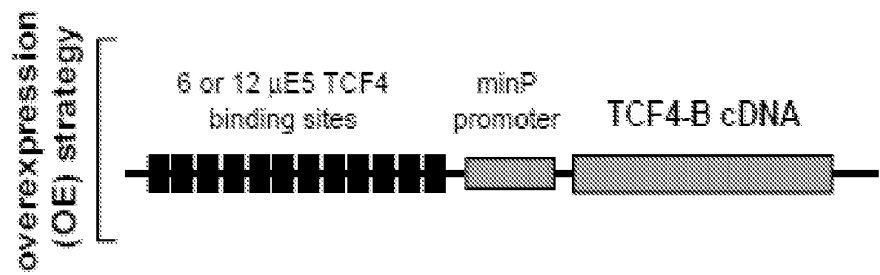


FIG. 11E

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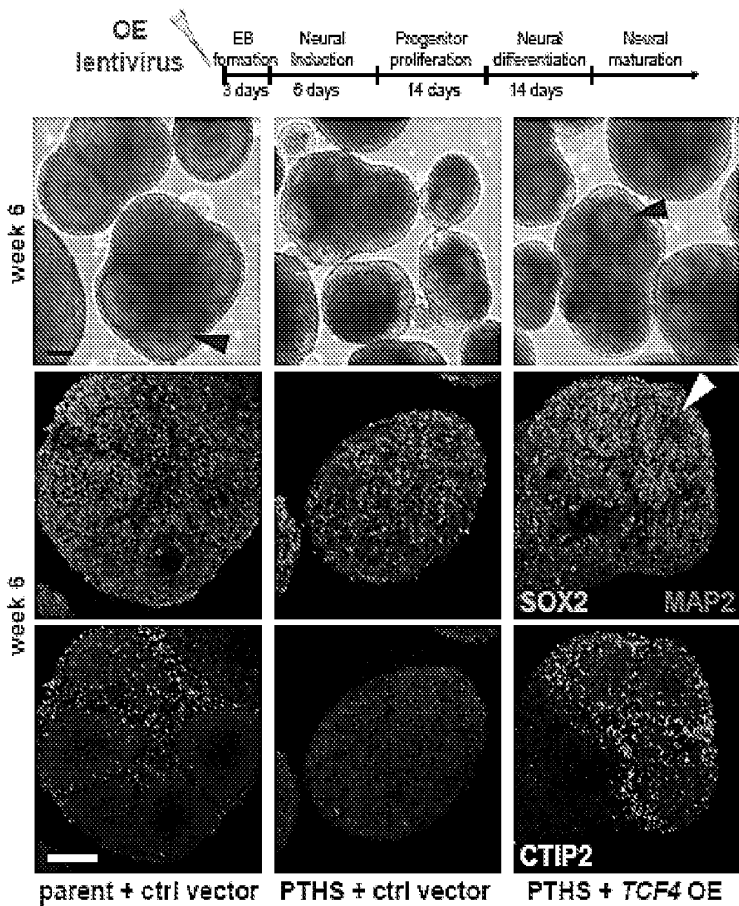


FIG. 11F

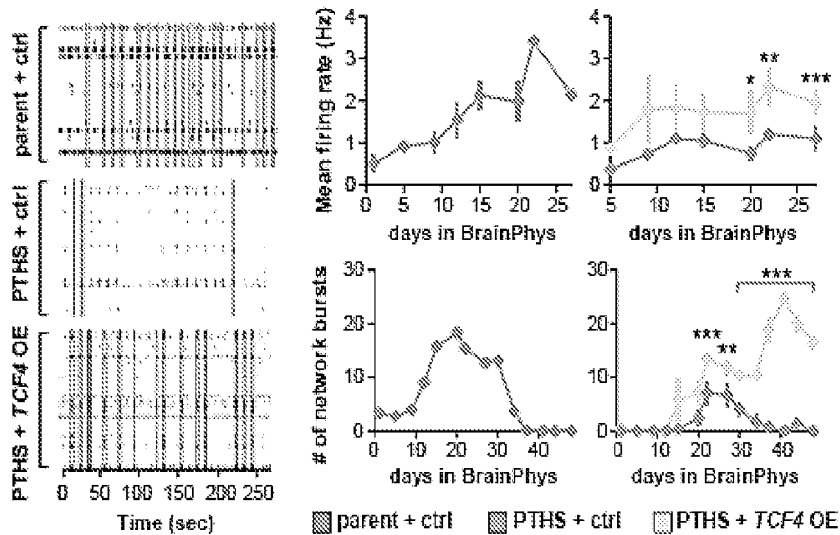


FIG. 11G

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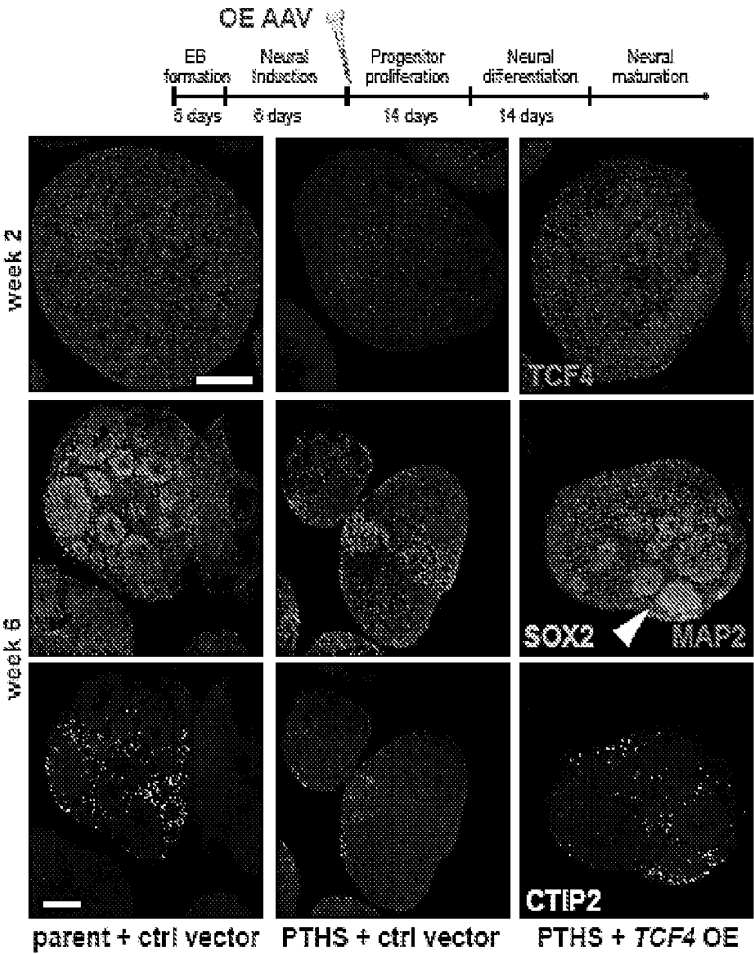


FIG. 11H

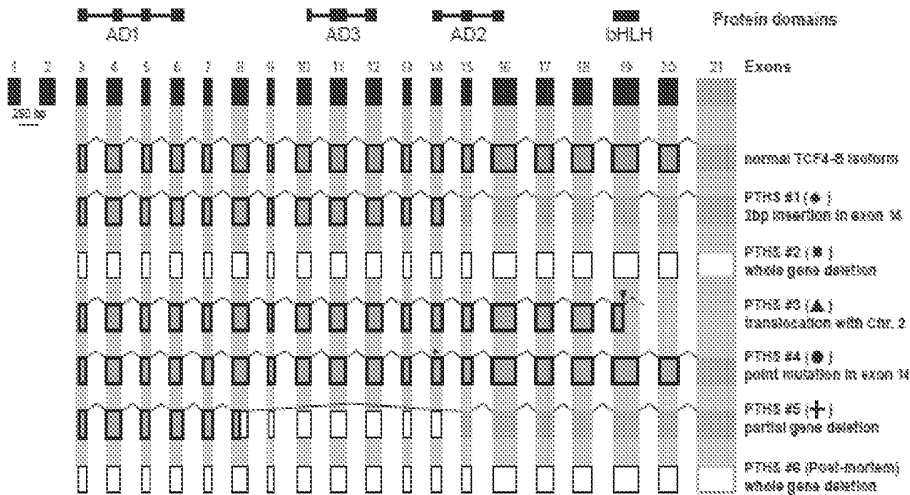


FIG. 12A

PTHS #2

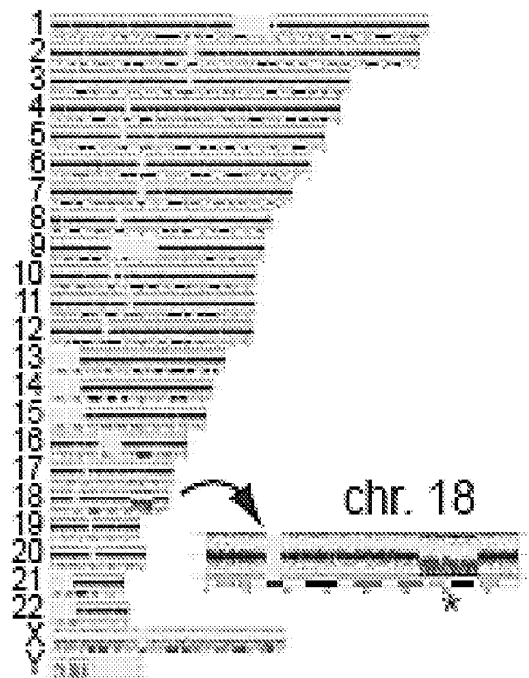


FIG. 12B

iPSC growth rate

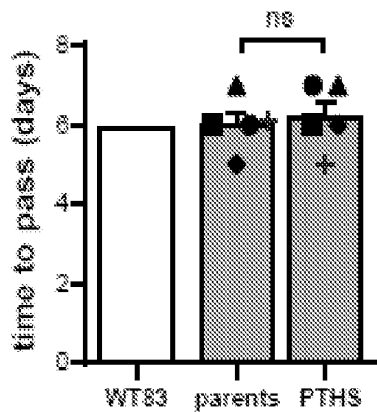


FIG. 12C

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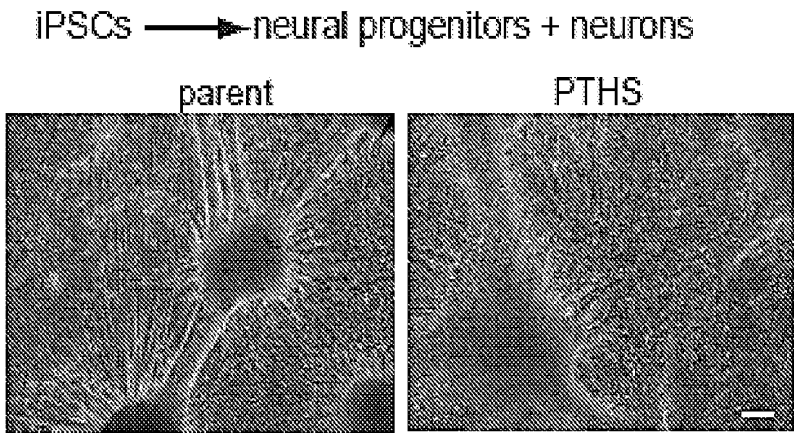


FIG. 12D

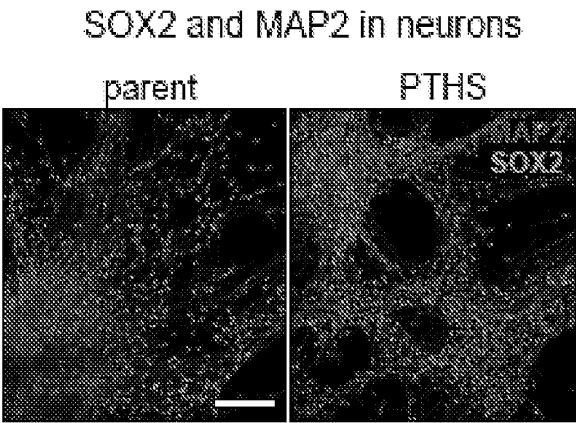


FIG. 12E

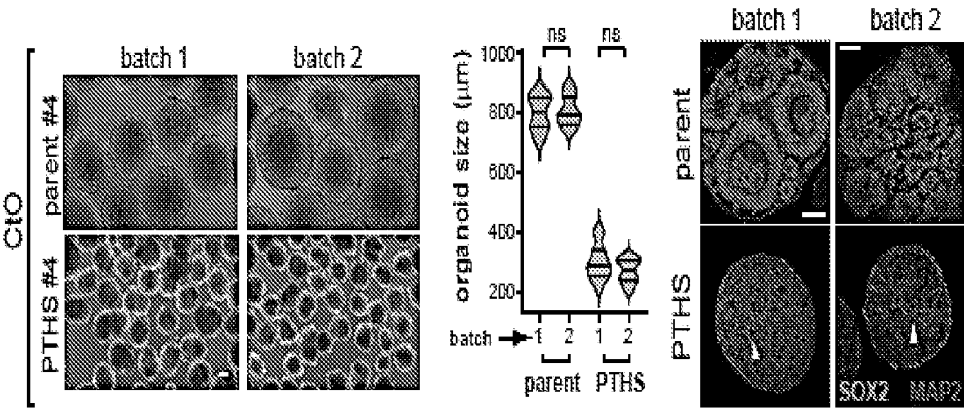


FIG. 12F

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MAP2 and SOX2 in sPOs

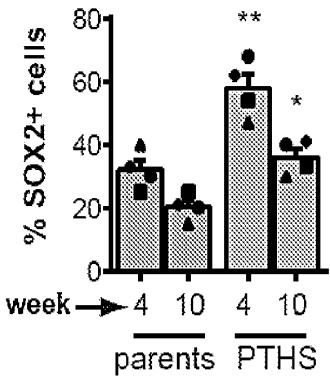


FIG. 12G

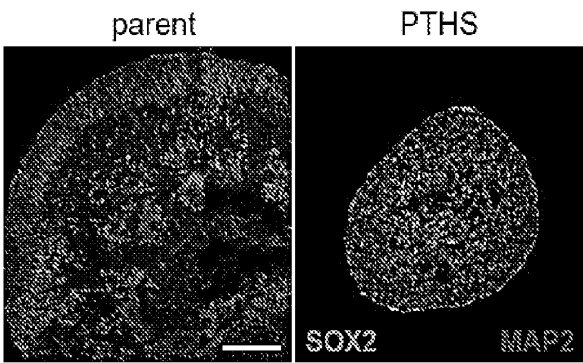


FIG. 12H

SOX2 in sPOs

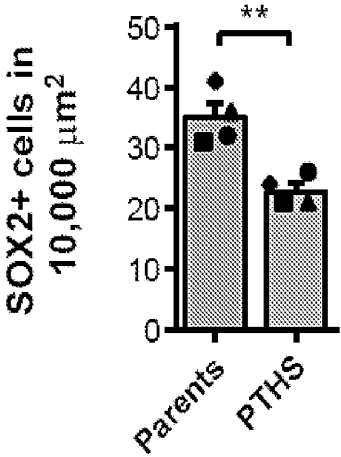


FIG. 12I

SATB2 in CtOs

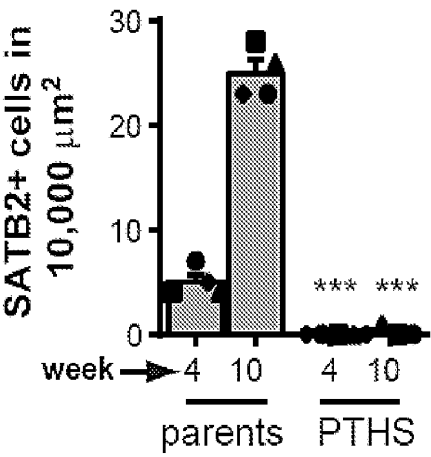


FIG. 12J

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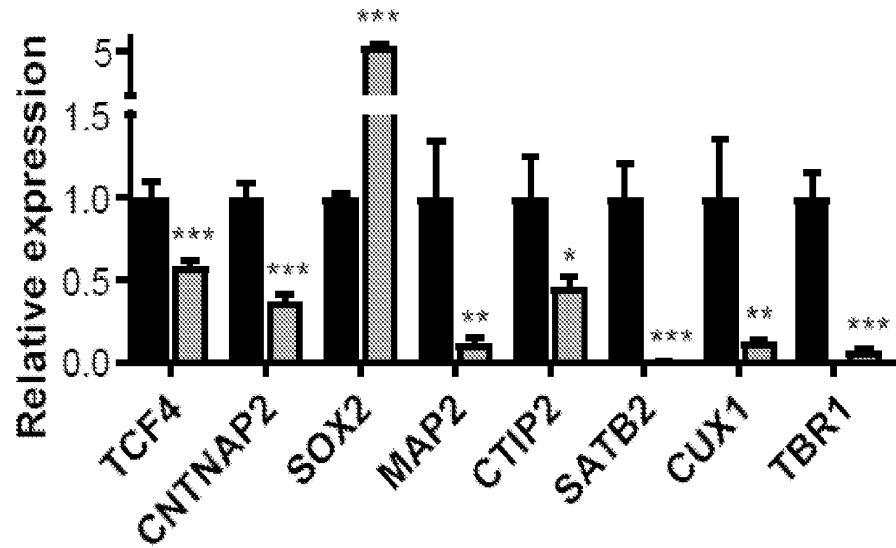


FIG. 12K

CTIP2 cell counts in post-mortem sample

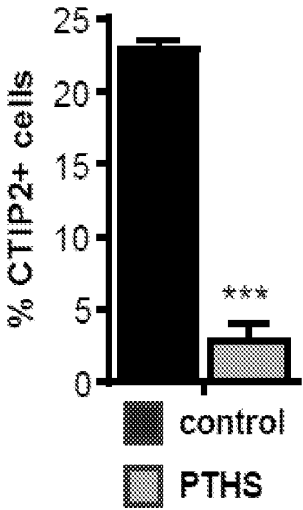


FIG. 12L

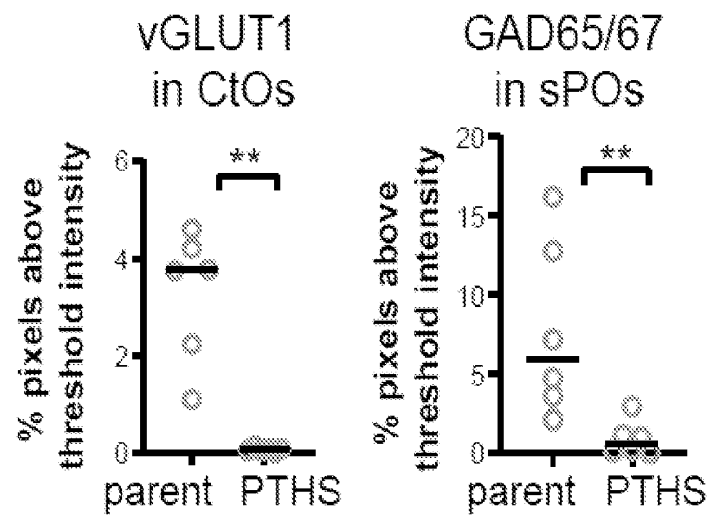


FIG. 12M

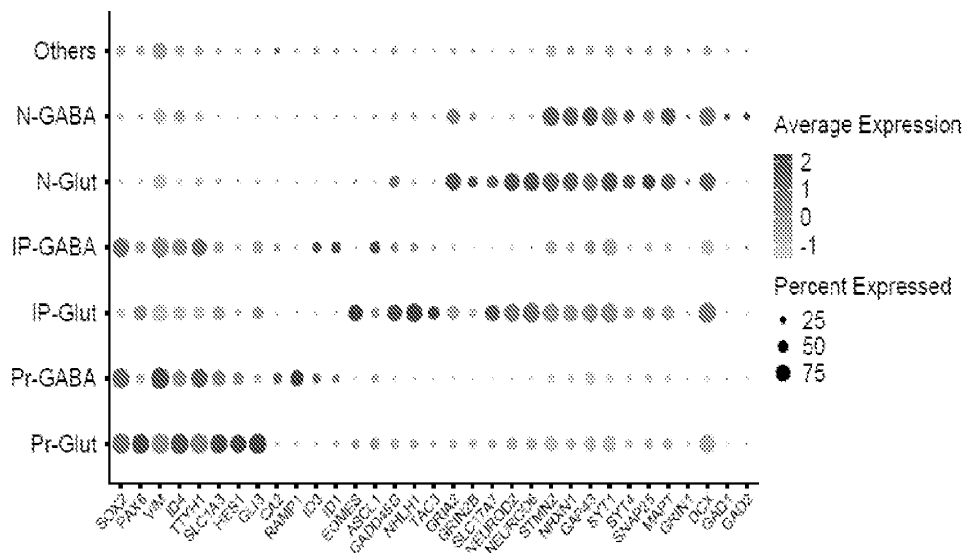


FIG. 13A

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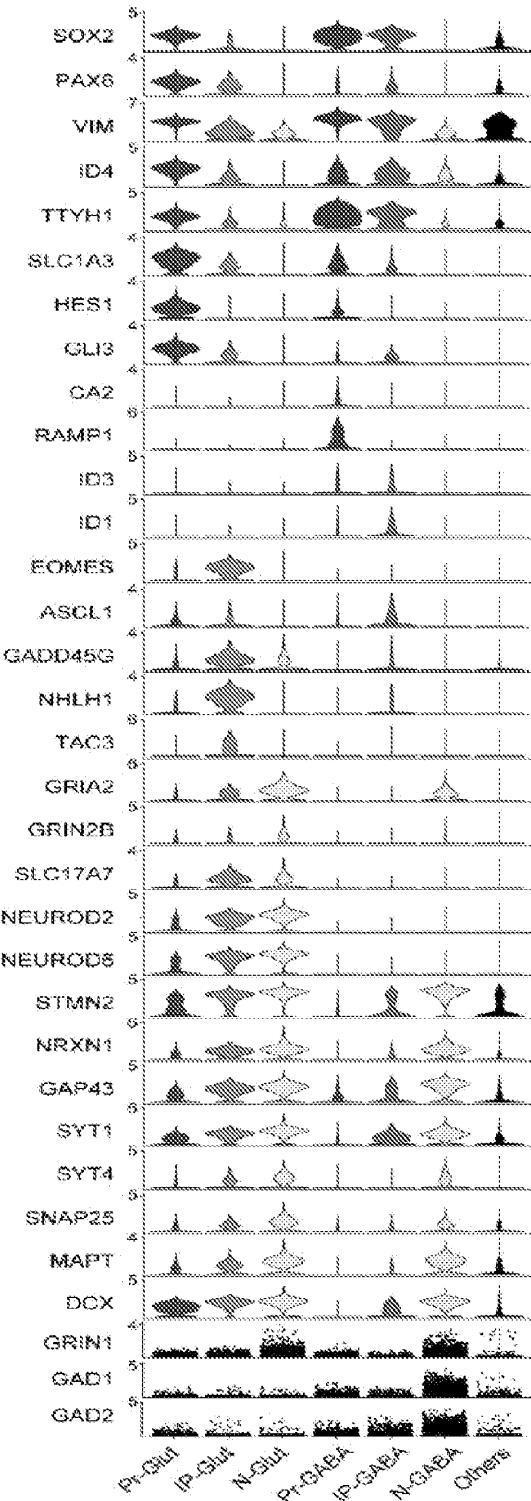


FIG. 13B

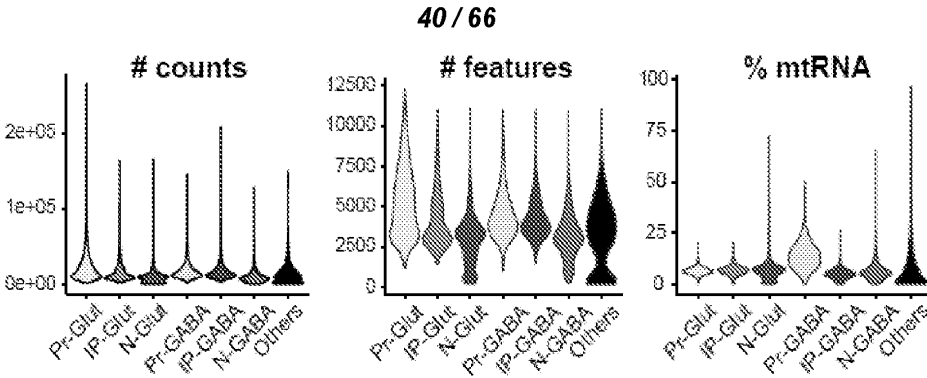


FIG. 13C

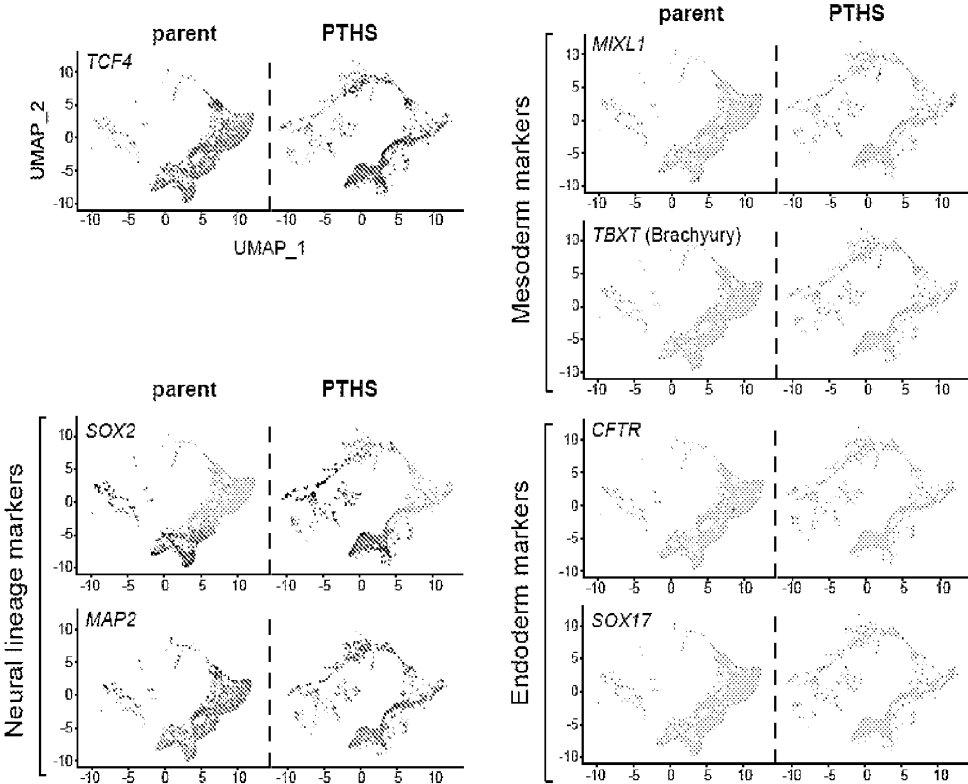


FIG. 13D

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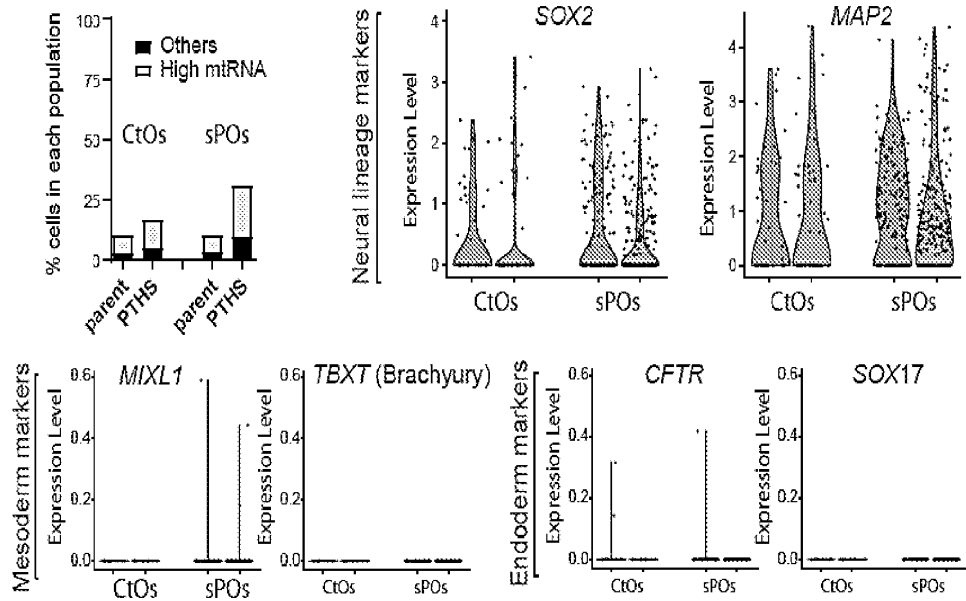


FIG. 13E

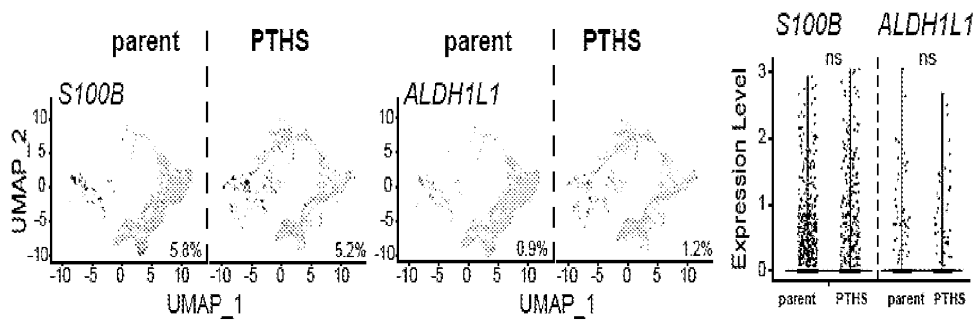


FIG. 13F

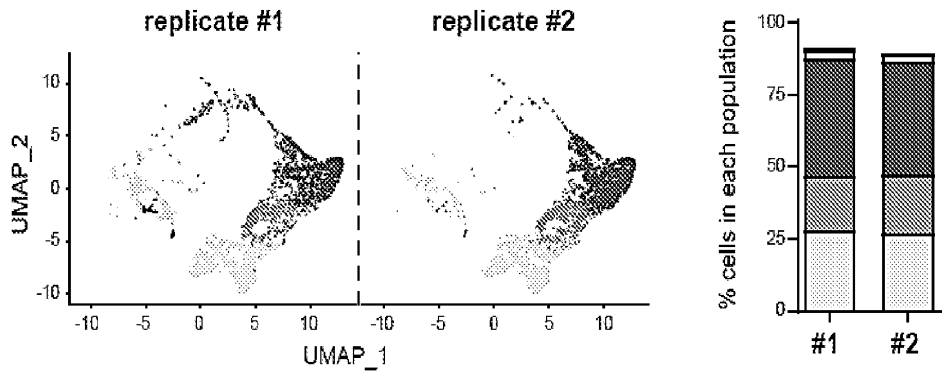


FIG. 13G

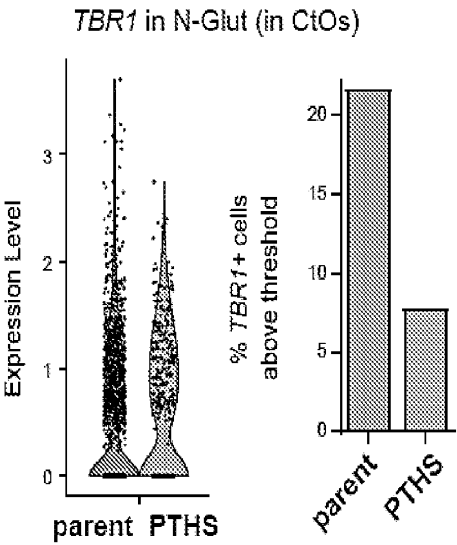


FIG. 13H

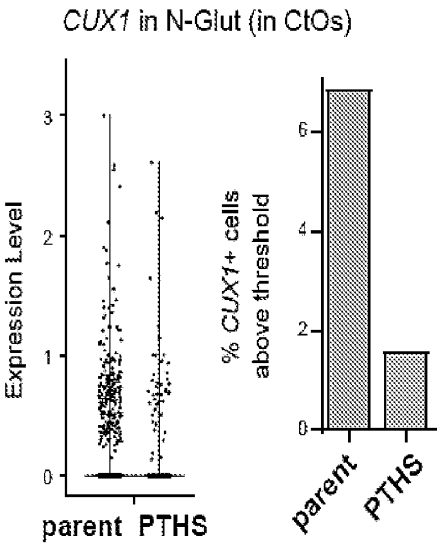


FIG. 13I

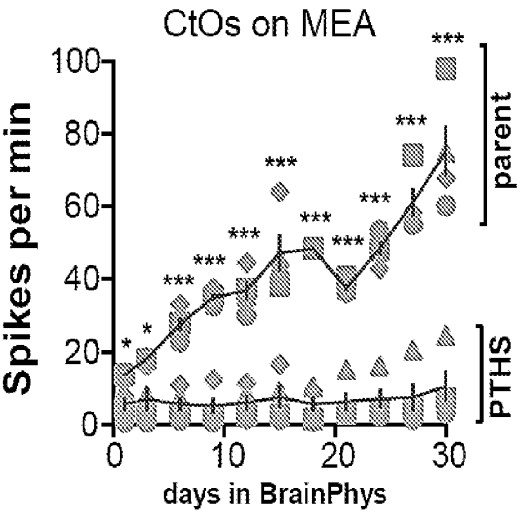


FIG. 14A

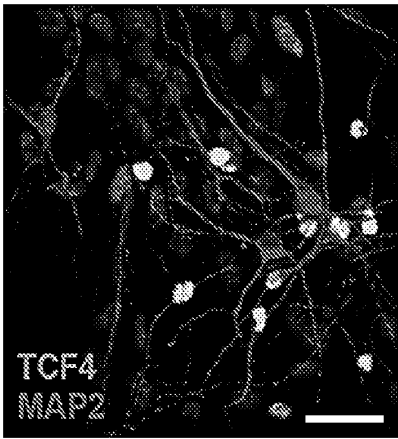


FIG. 14B

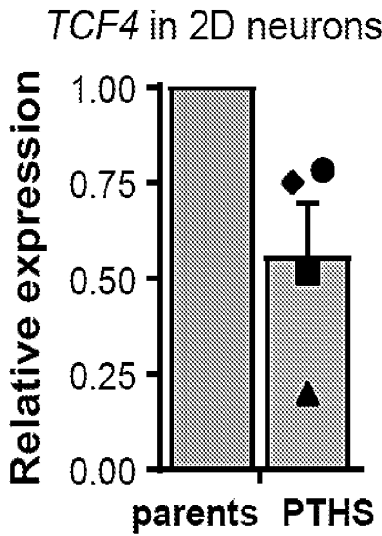


FIG. 14C

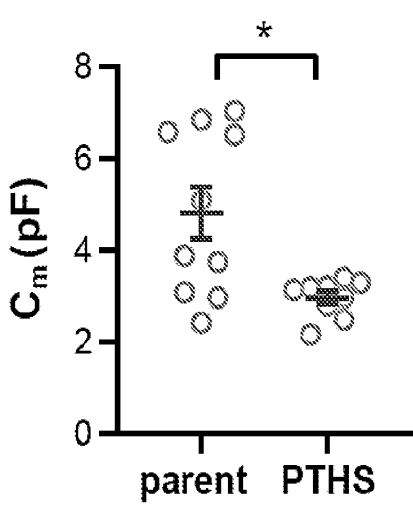


FIG. 14D

Electrophys. parameters in 2D neurons

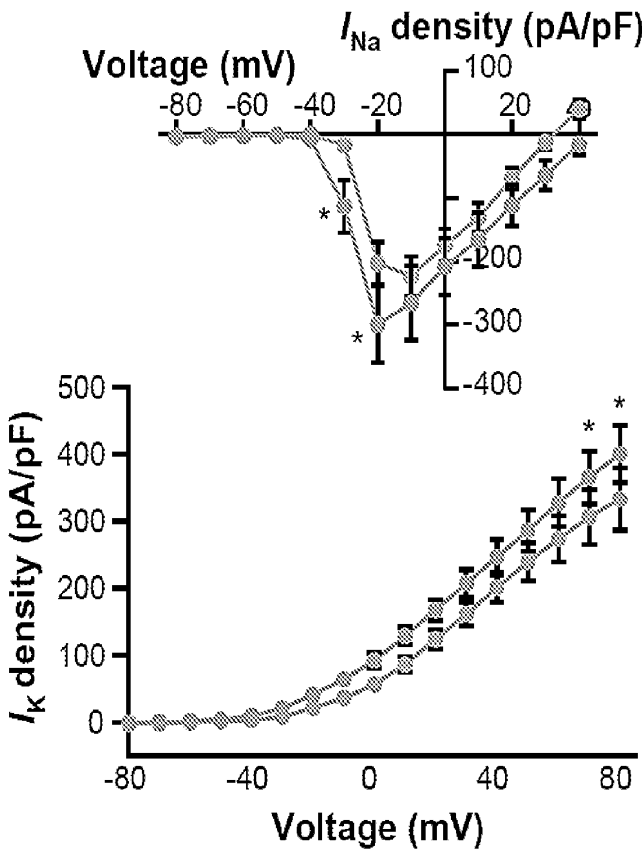


FIG. 14E

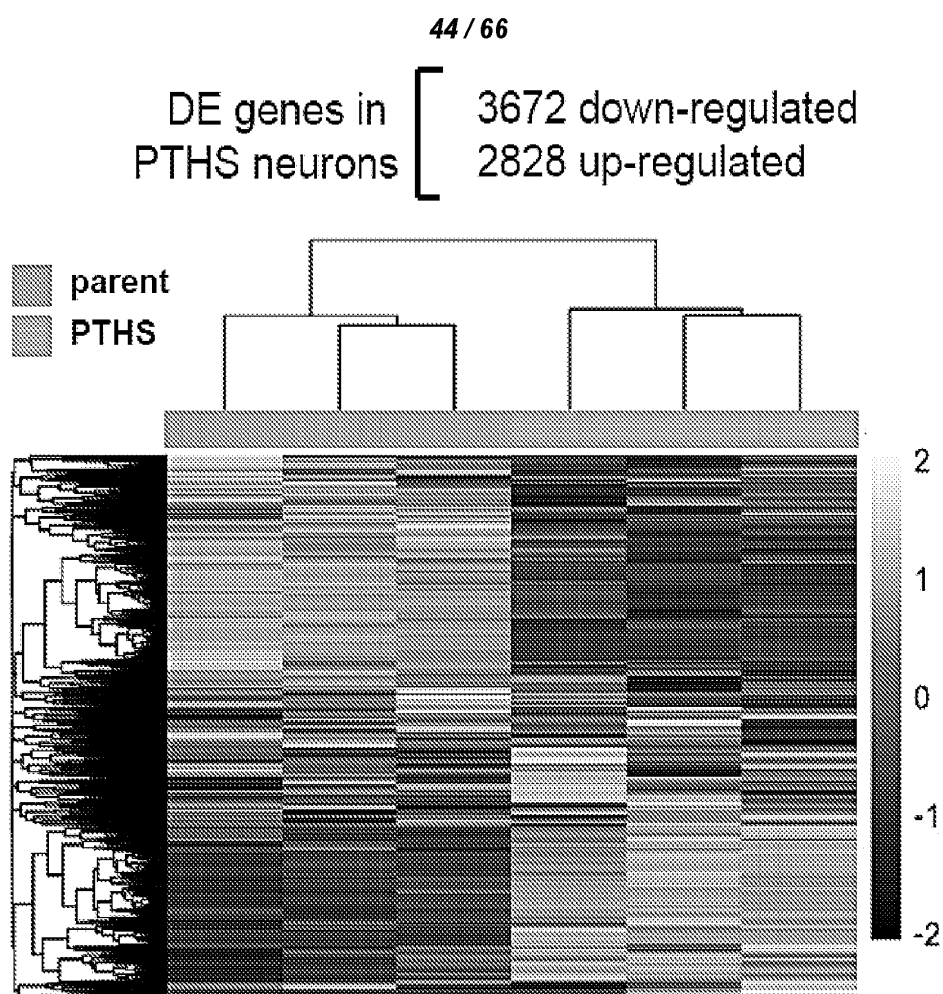
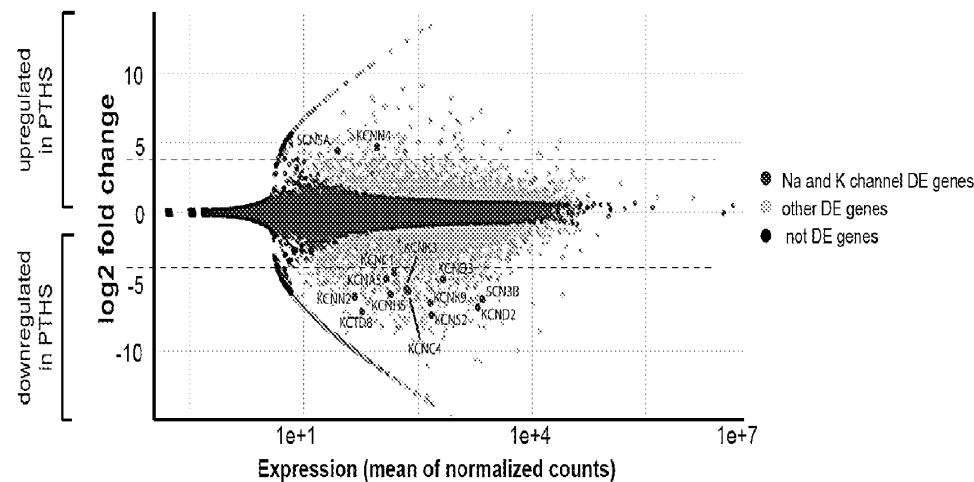
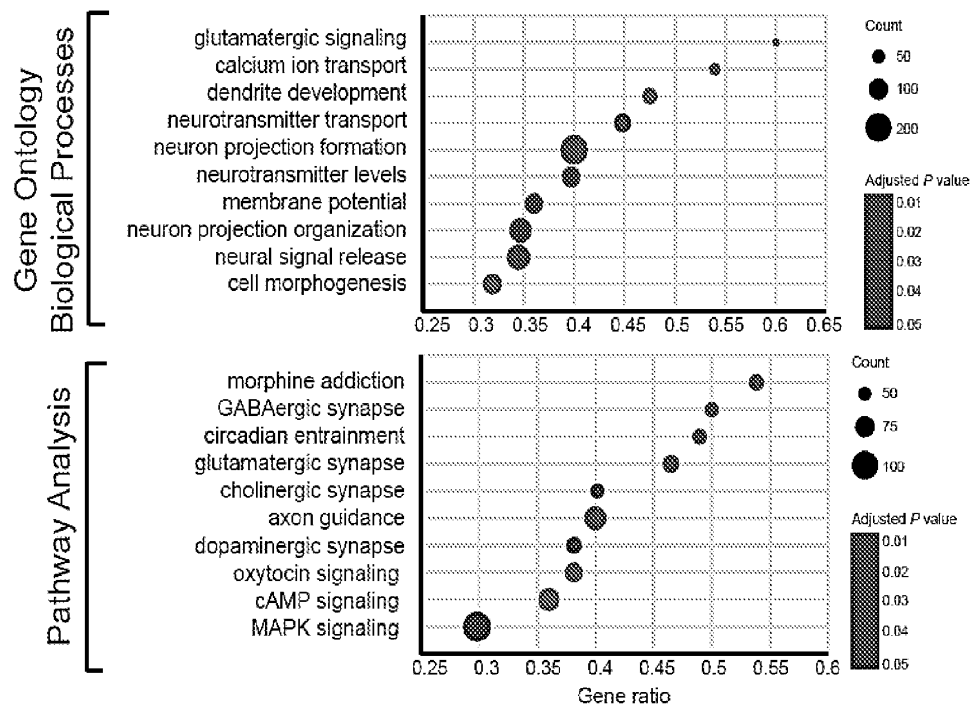


FIG. 14F

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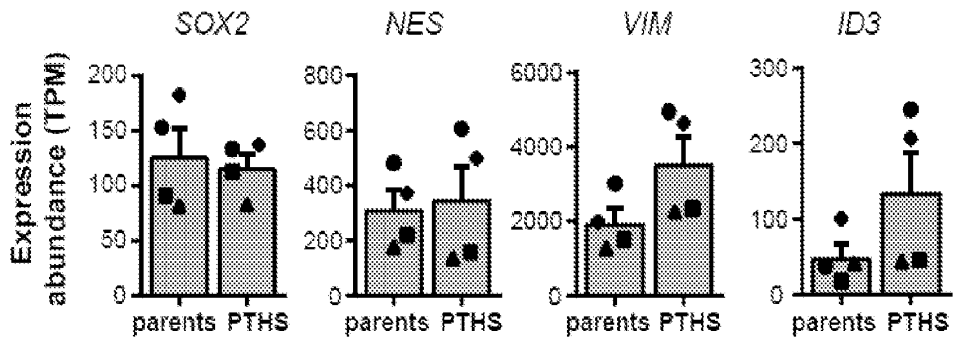


FIG. 15A

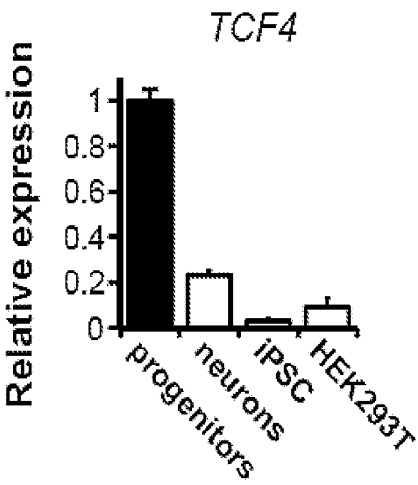


FIG. 15B

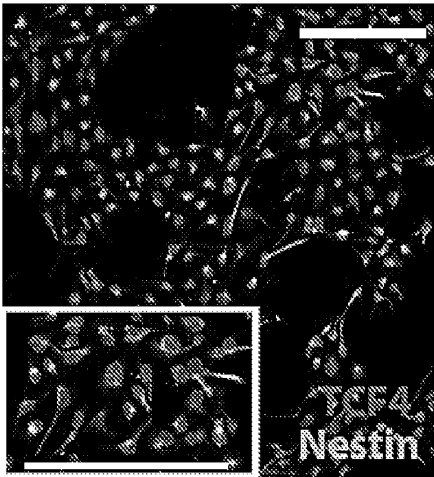


FIG. 15C

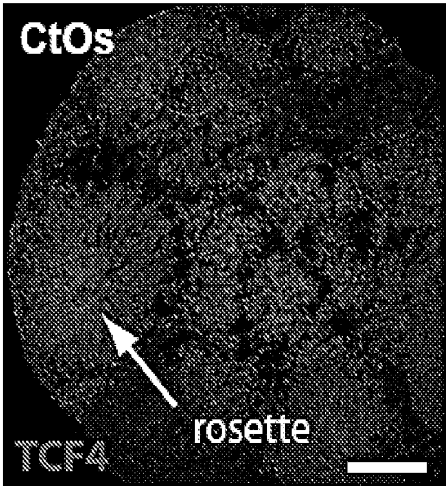


FIG. 15D

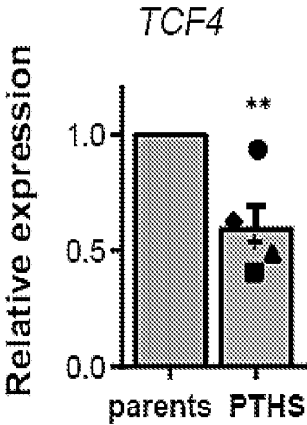


FIG. 15E

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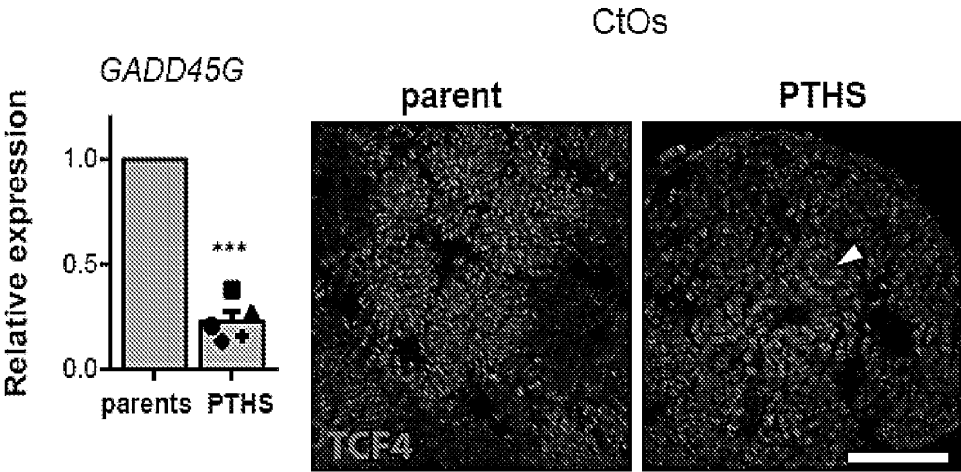


FIG. 15F

FIG. 15G

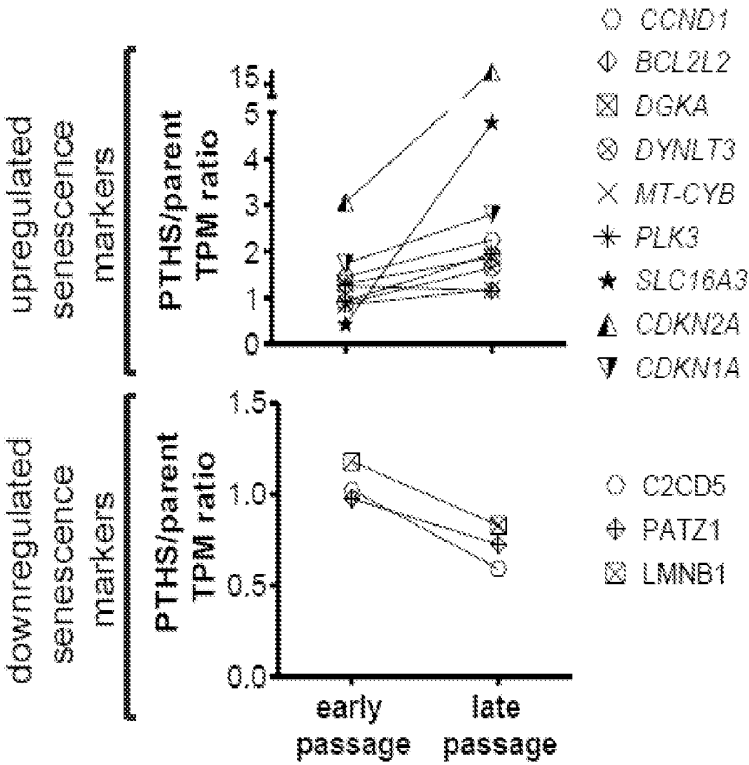


FIG. 15H

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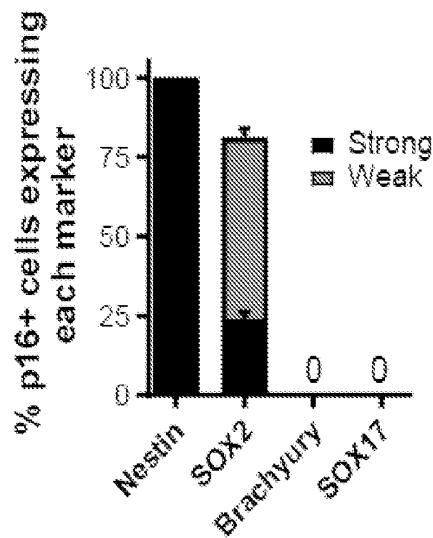


FIG. 15I

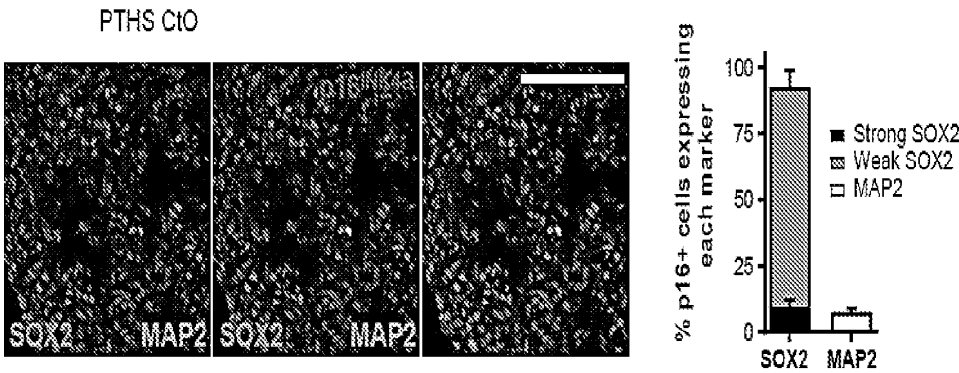


FIG. 15J

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shRNA for *TCF4*

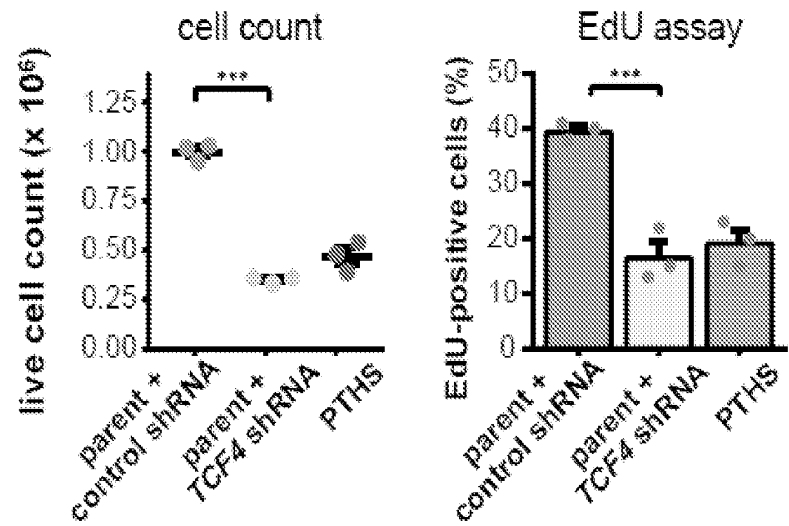


FIG. 15K

shRNA for *TCF4*

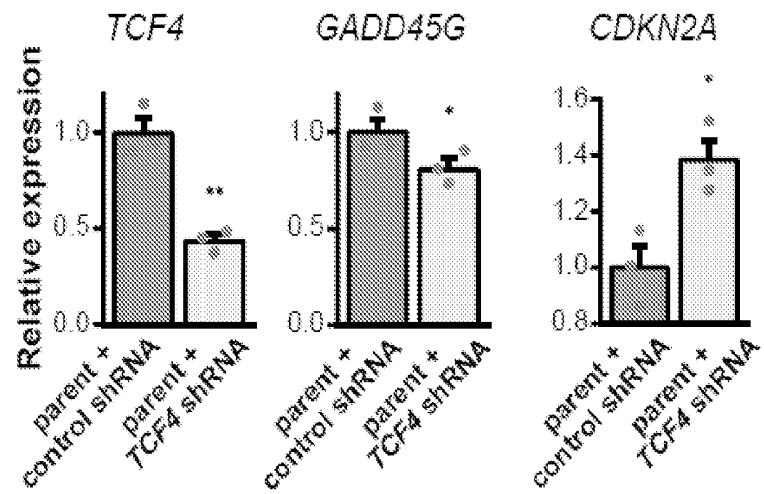


FIG. 15L

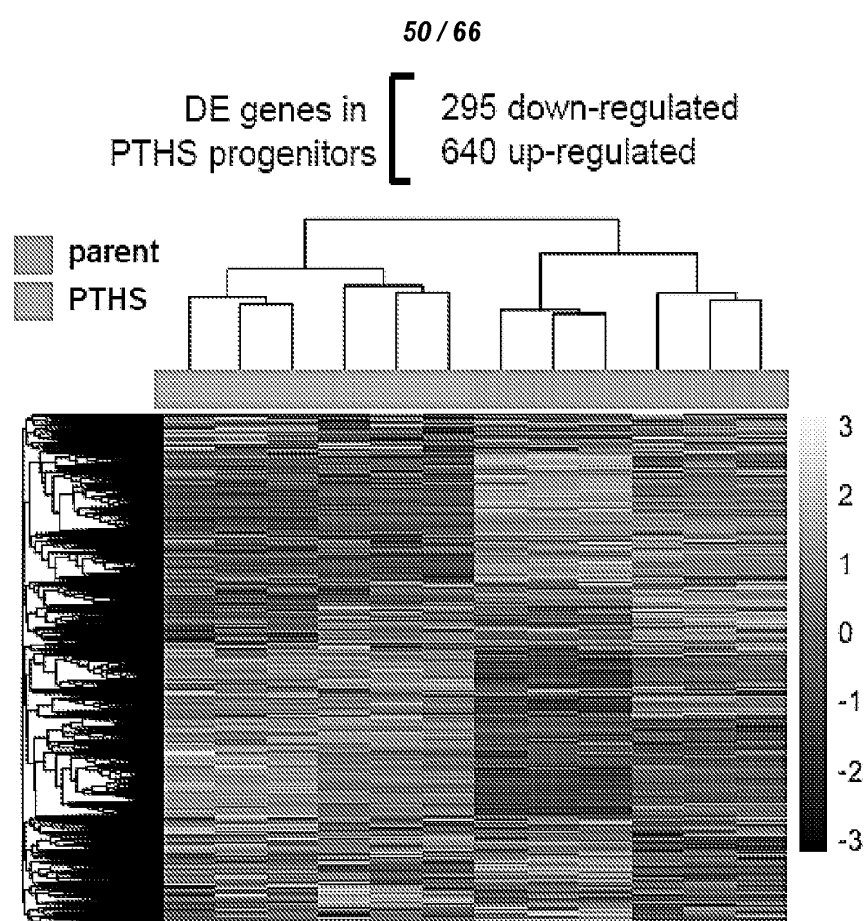


FIG. 15M

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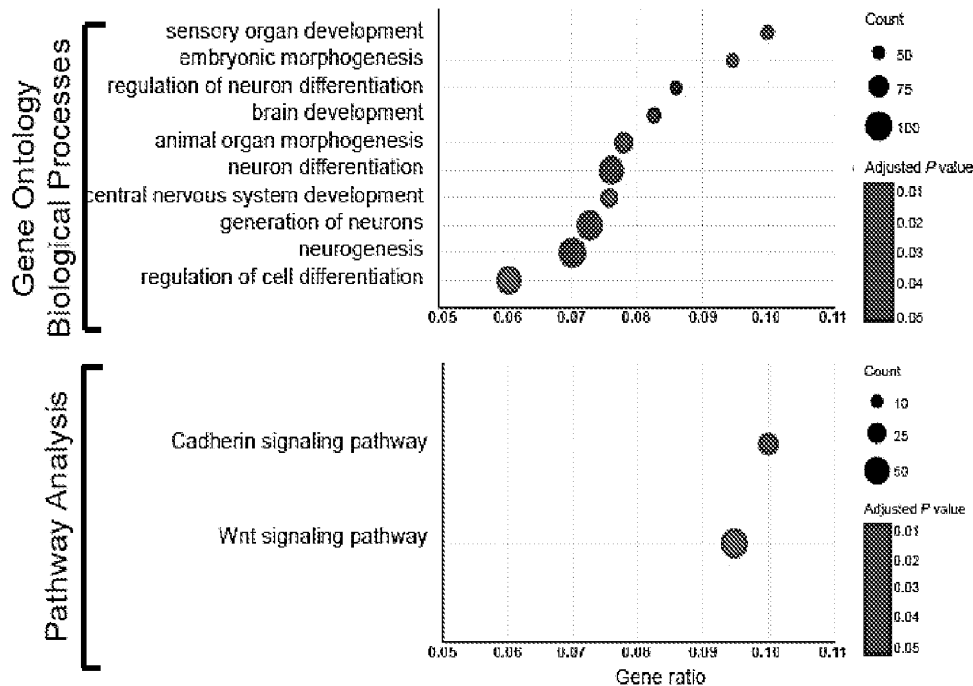


FIG. 15N

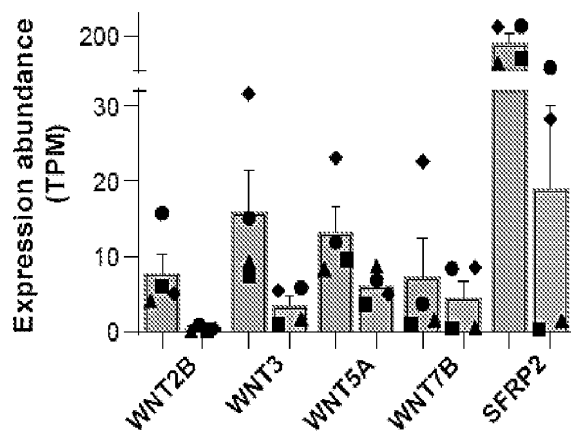


FIG. 16A

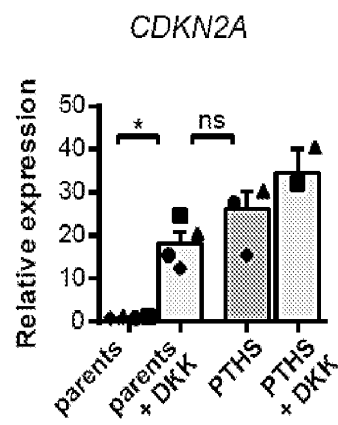


FIG. 16B

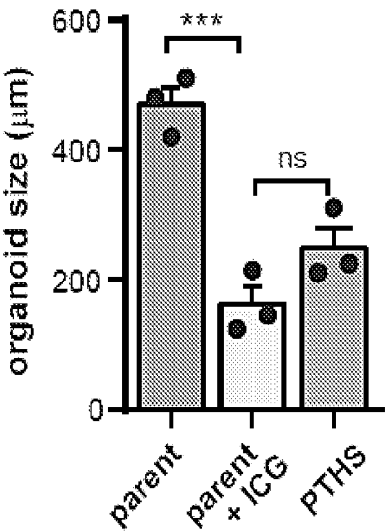


FIG. 16C

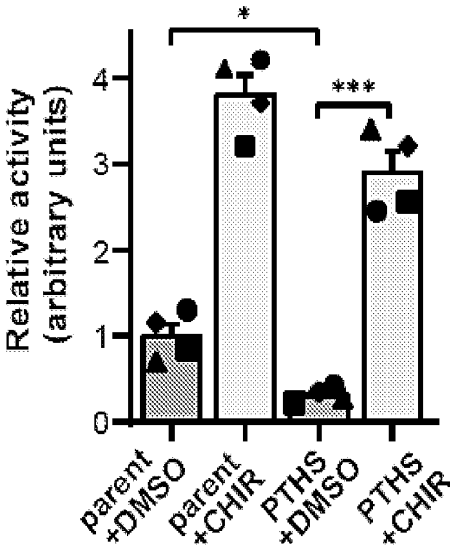


FIG. 16D

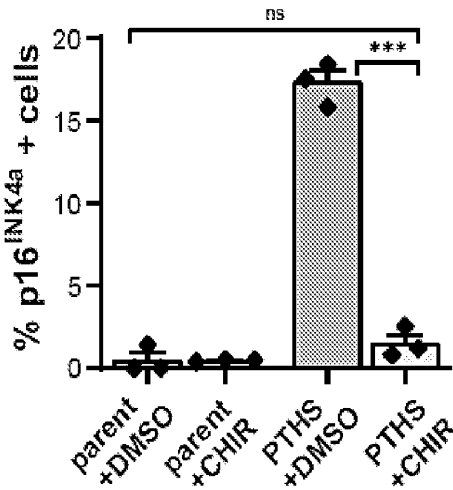


FIG. 16E

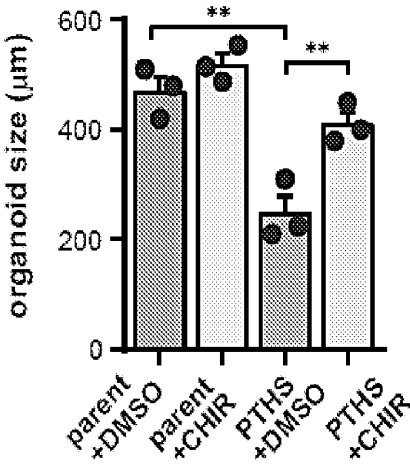


FIG. 16F

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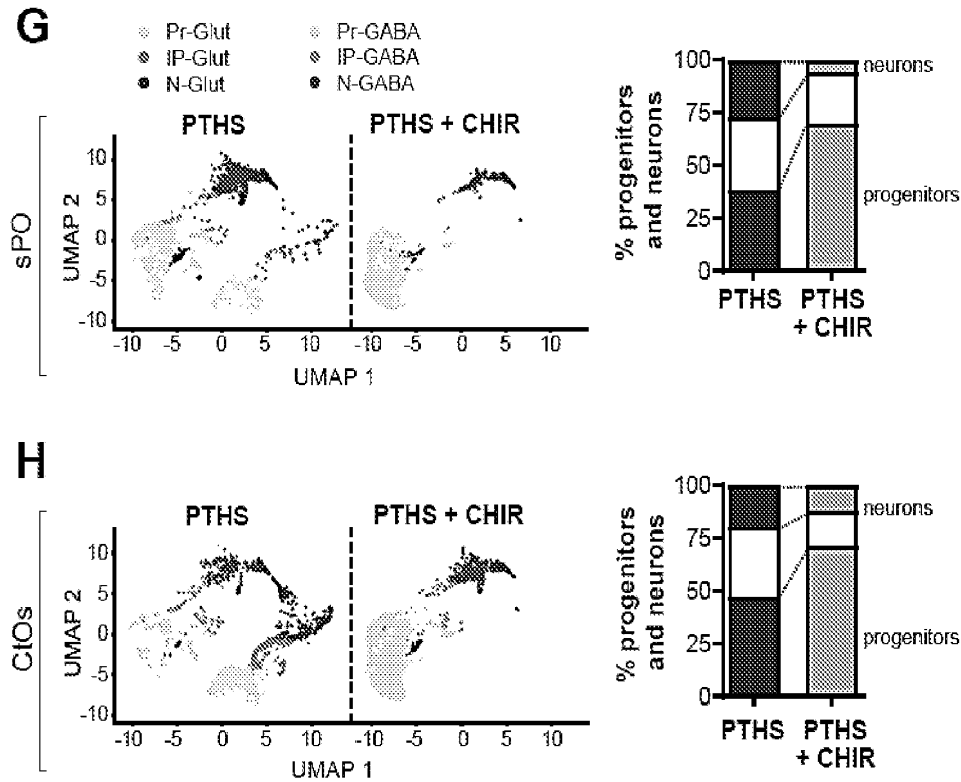


FIG. 16G-H

CtOs

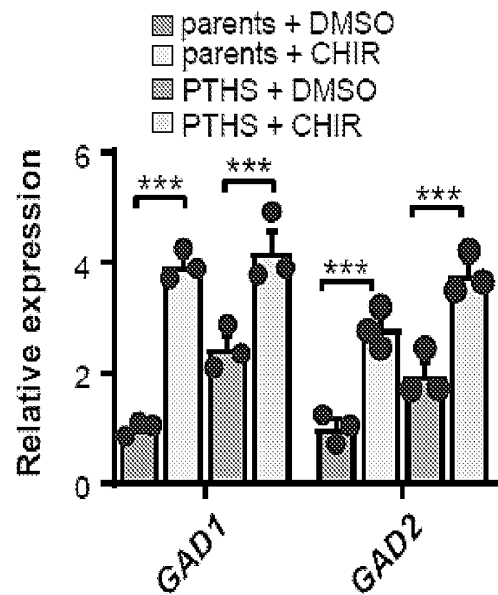


FIG. 16I

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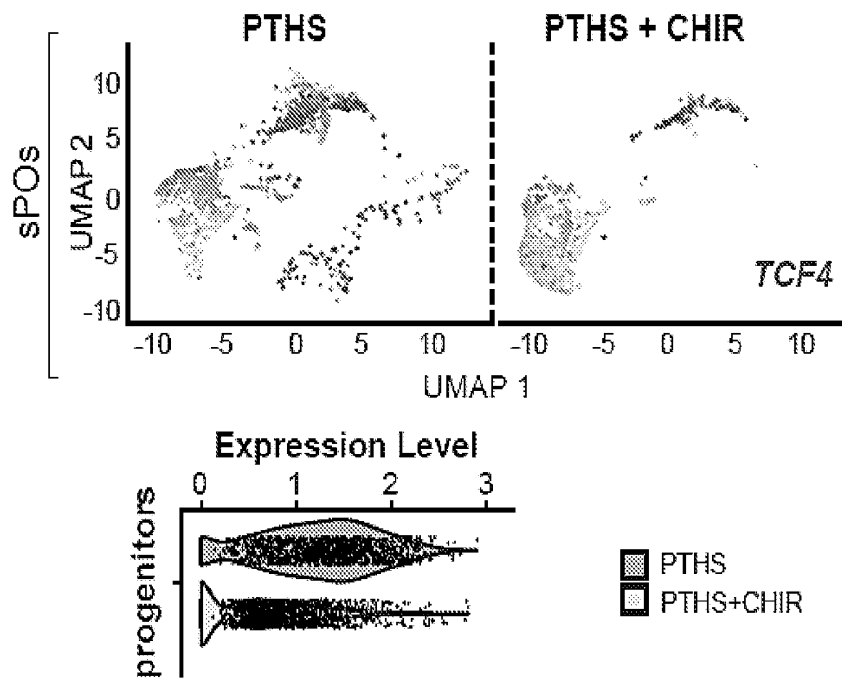


FIG. 16J

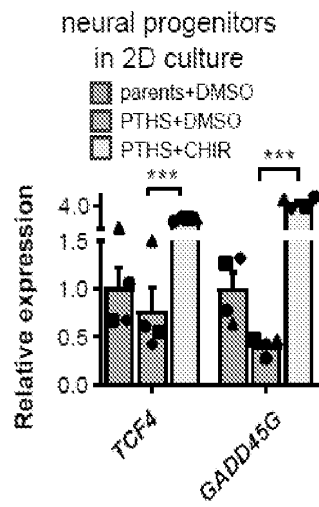


FIG. 16K

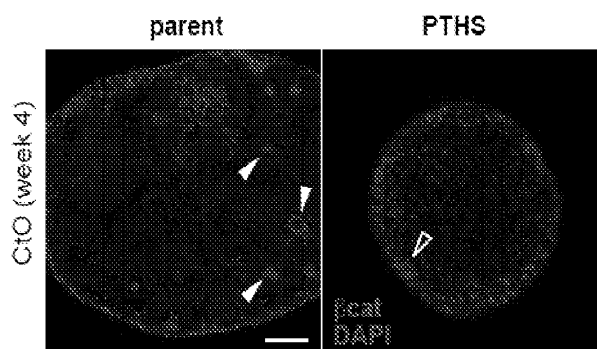


FIG. 16L

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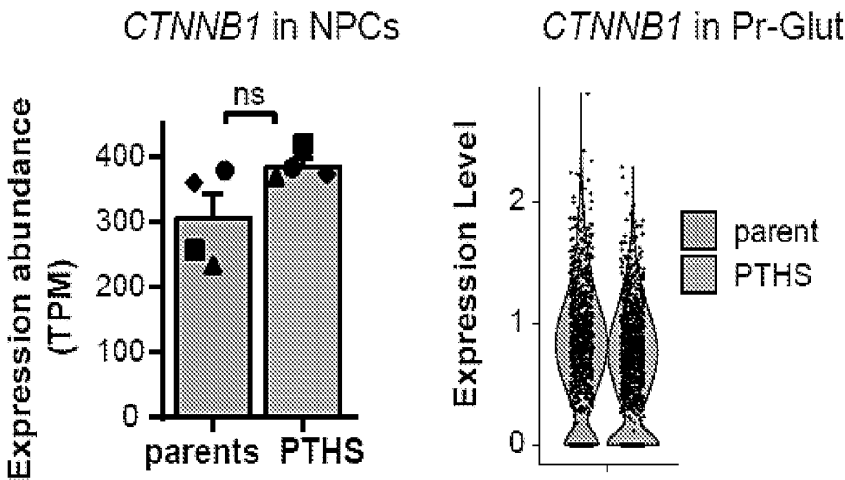


FIG. 16M

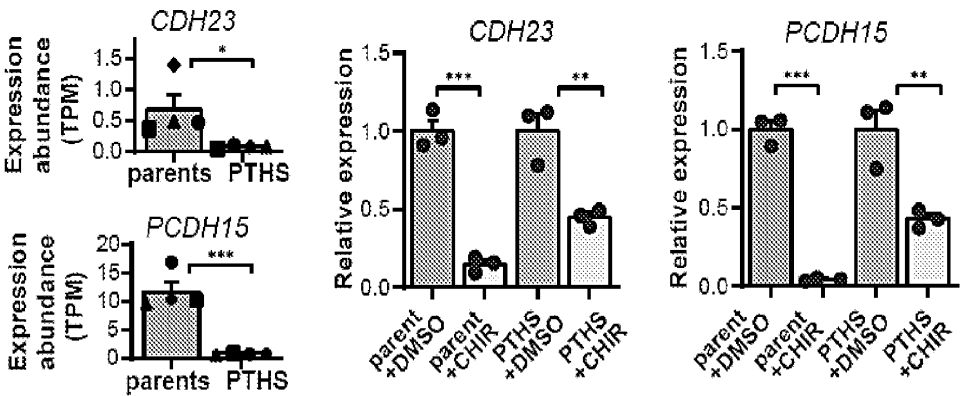


FIG. 16N

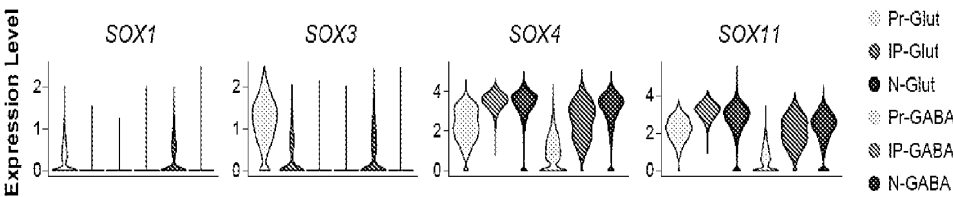


FIG. 17A

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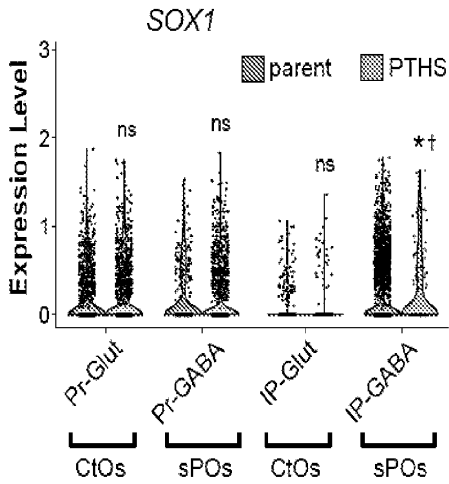


FIG. 17B

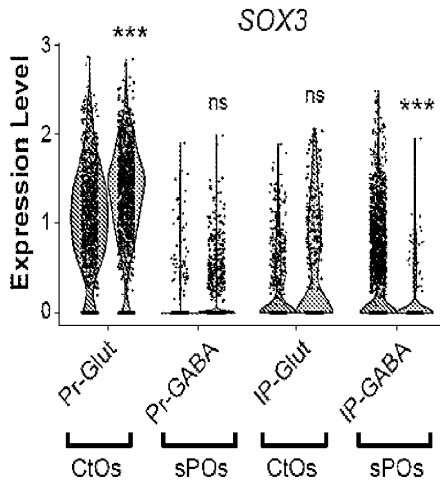


FIG. 17C

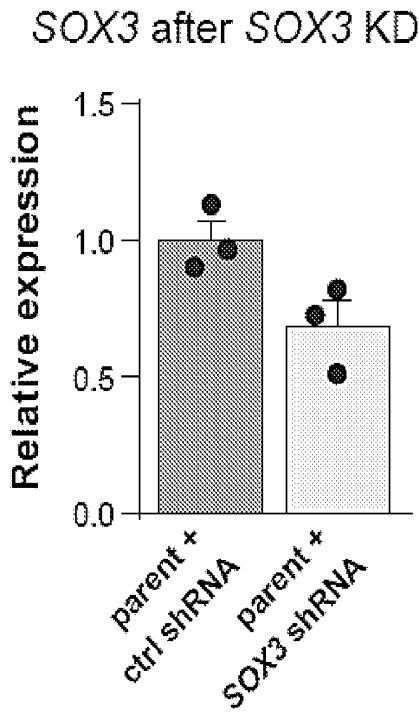


FIG. 17D

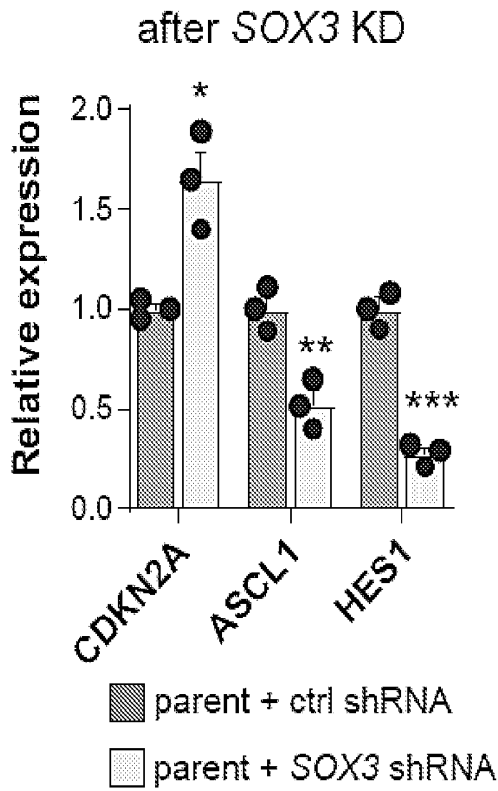


FIG. 17E

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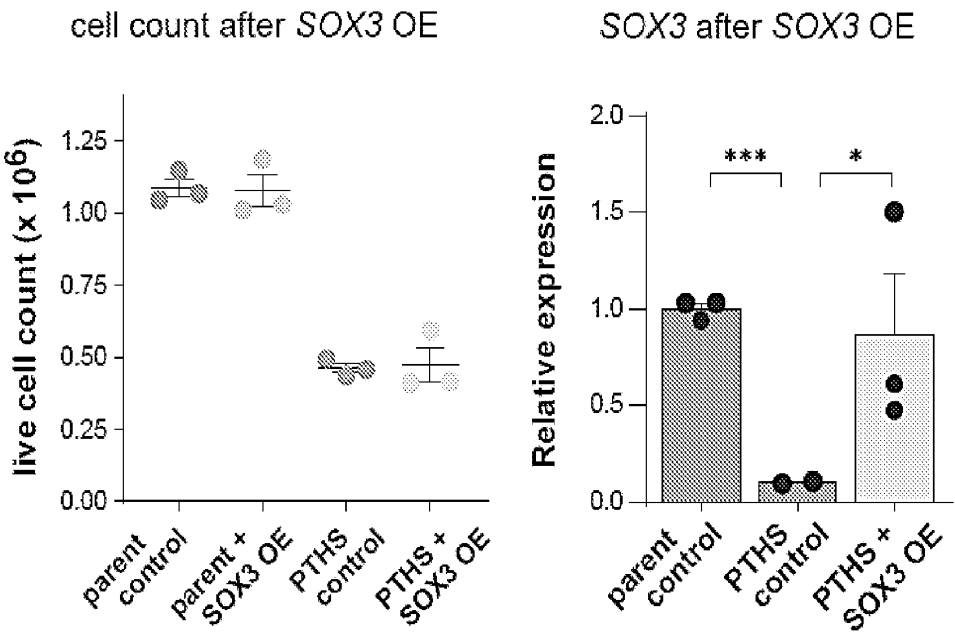


FIG. 17F

FIG. 17G

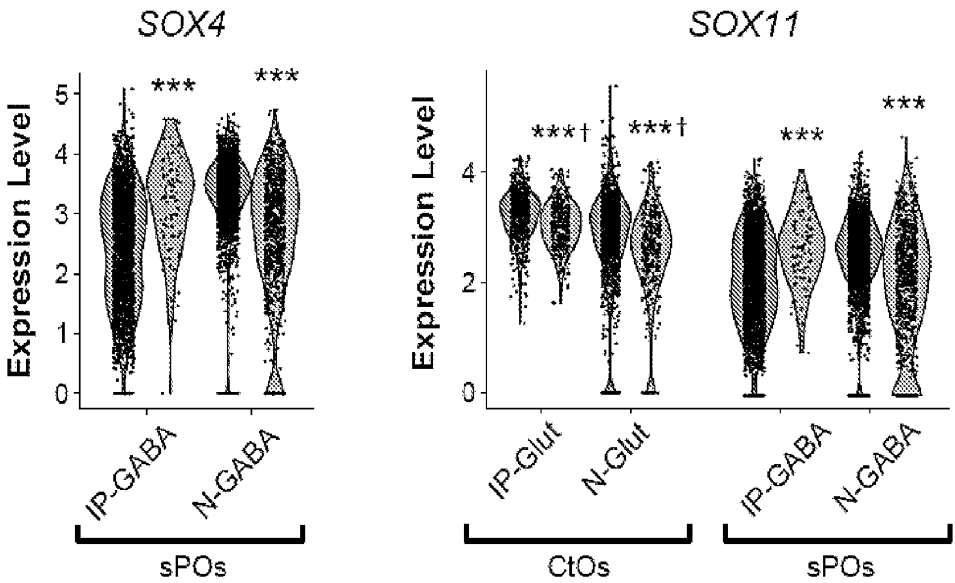


FIG. 17H

FIG. 17I

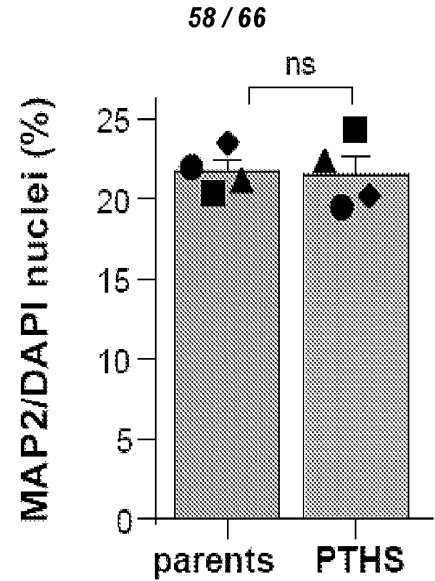


FIG. 17J

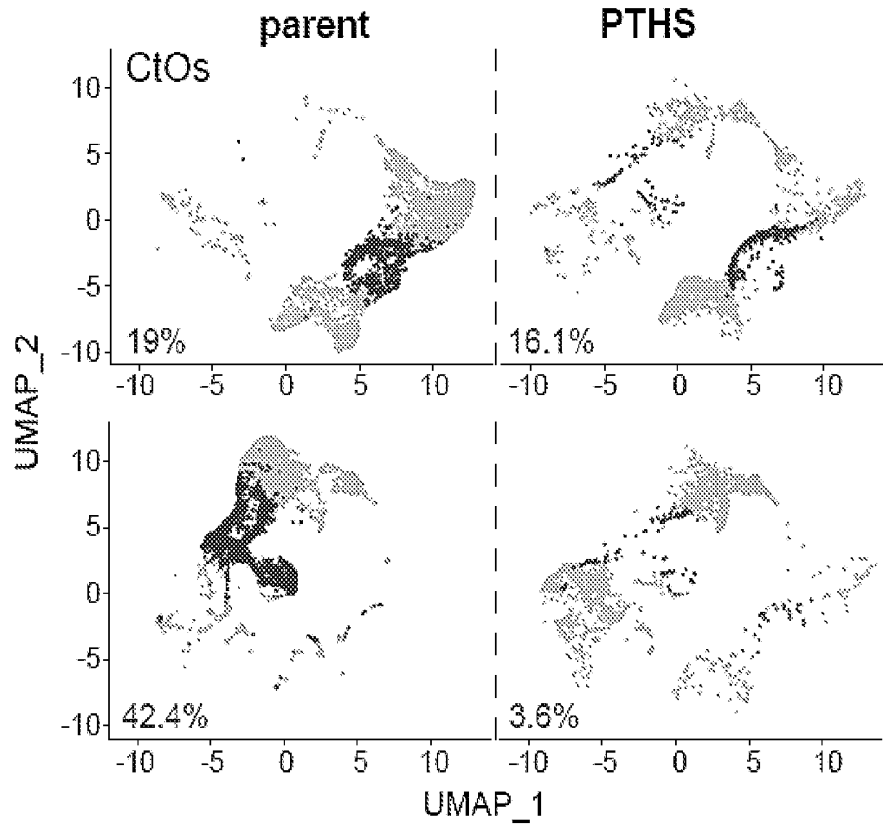


FIG. 17K

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POU3F2 (BRN2)

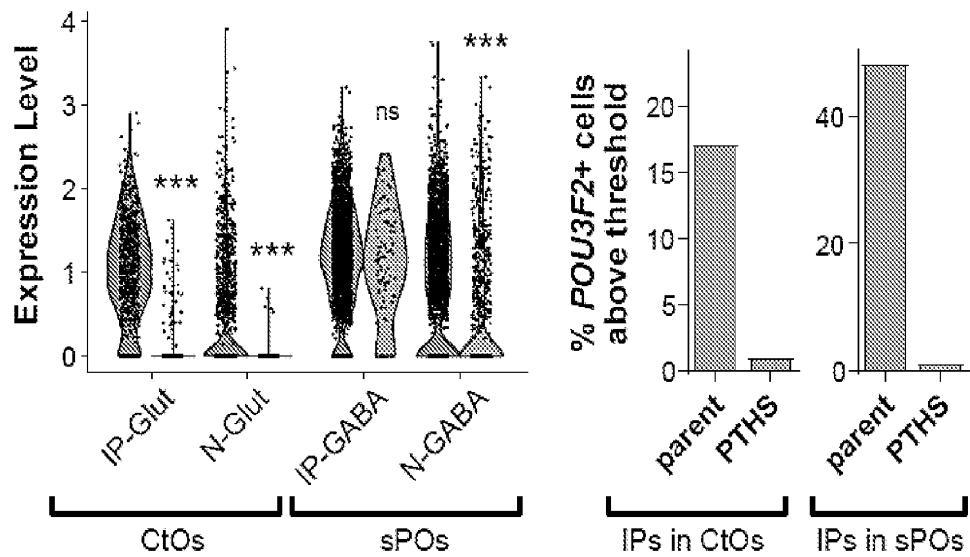


FIG. 17L

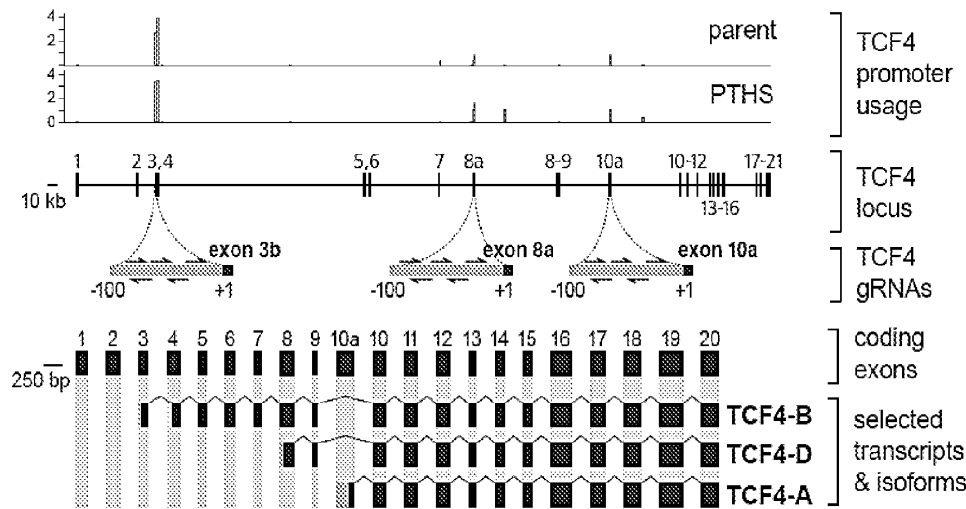


FIG. 18A

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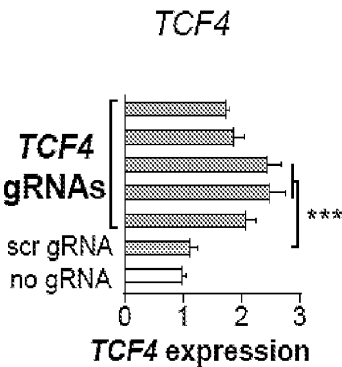


FIG. 18B

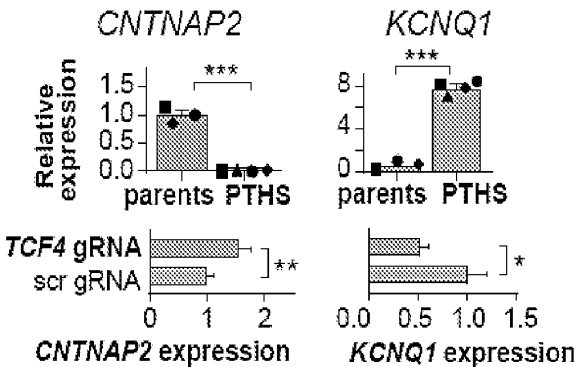


FIG. 18C

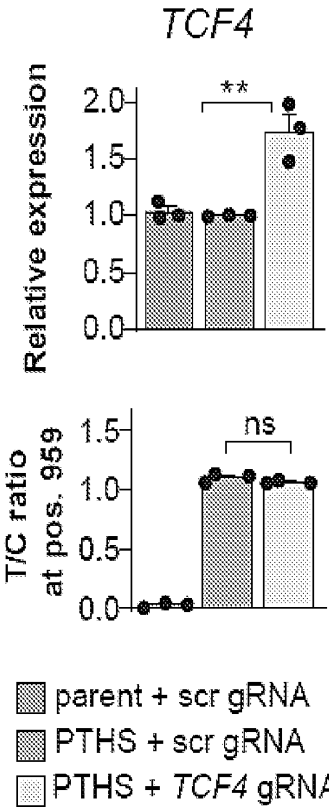


FIG. 18D

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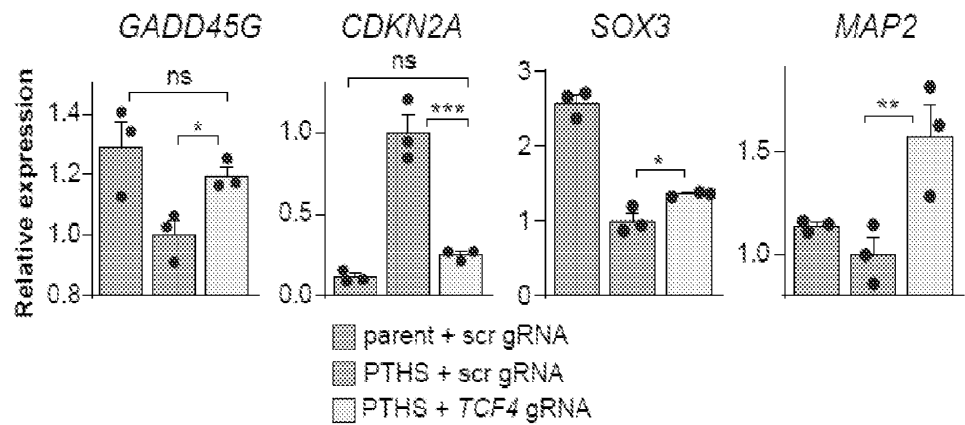


FIG. 18E

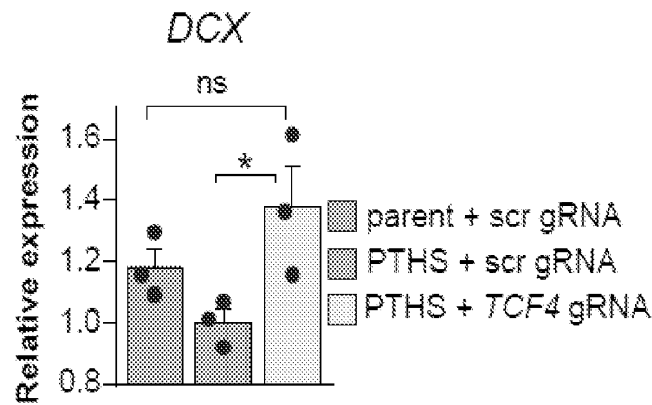


FIG. 18F

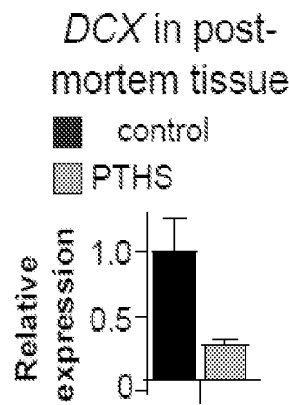


FIG. 18G

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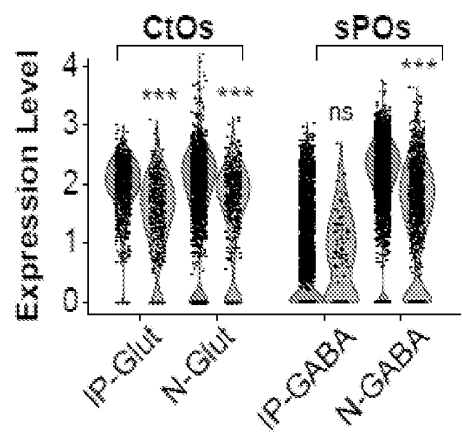


FIG. 18H

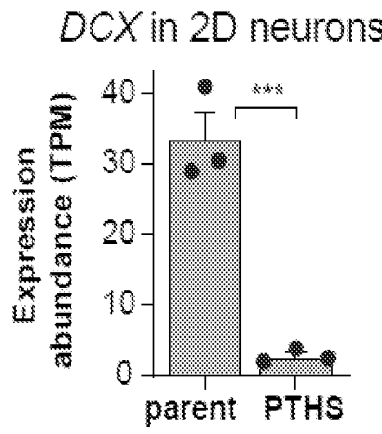


FIG. 18I

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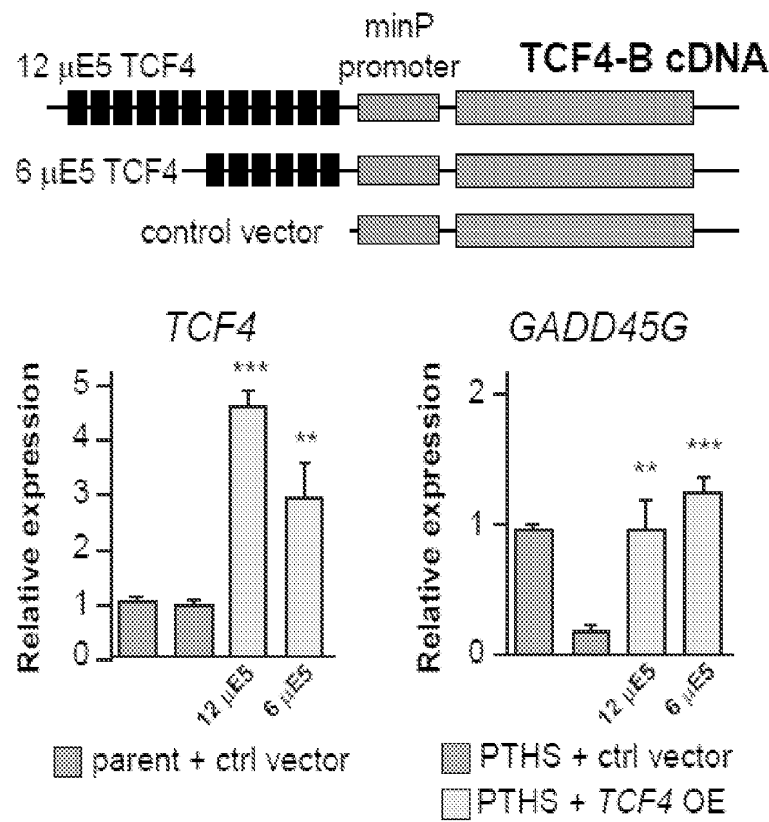


FIG. 18J

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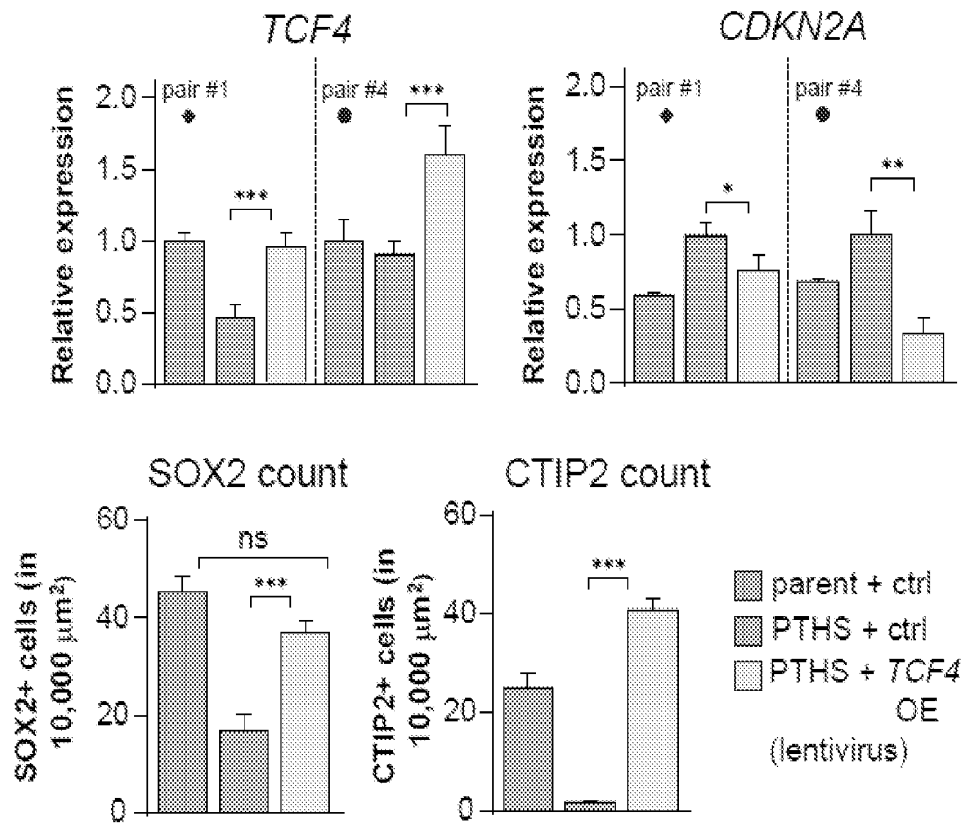


FIG. 18K

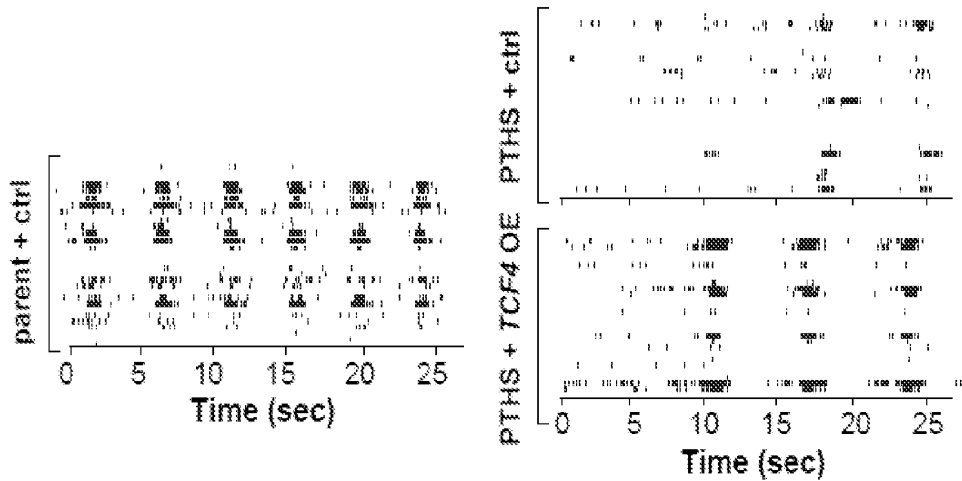


FIG. 18L

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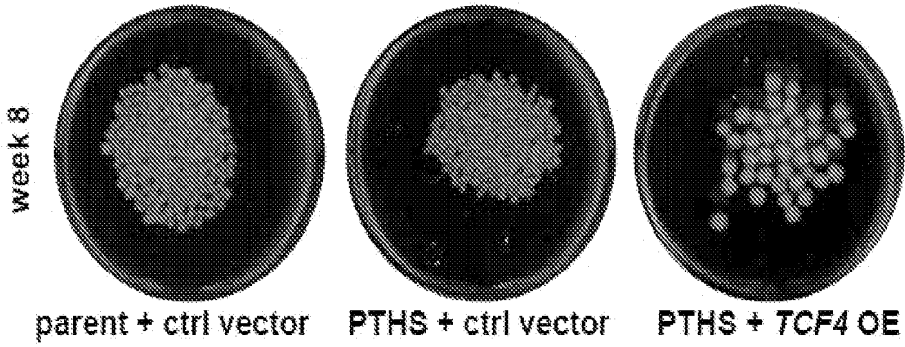


FIG. 18M

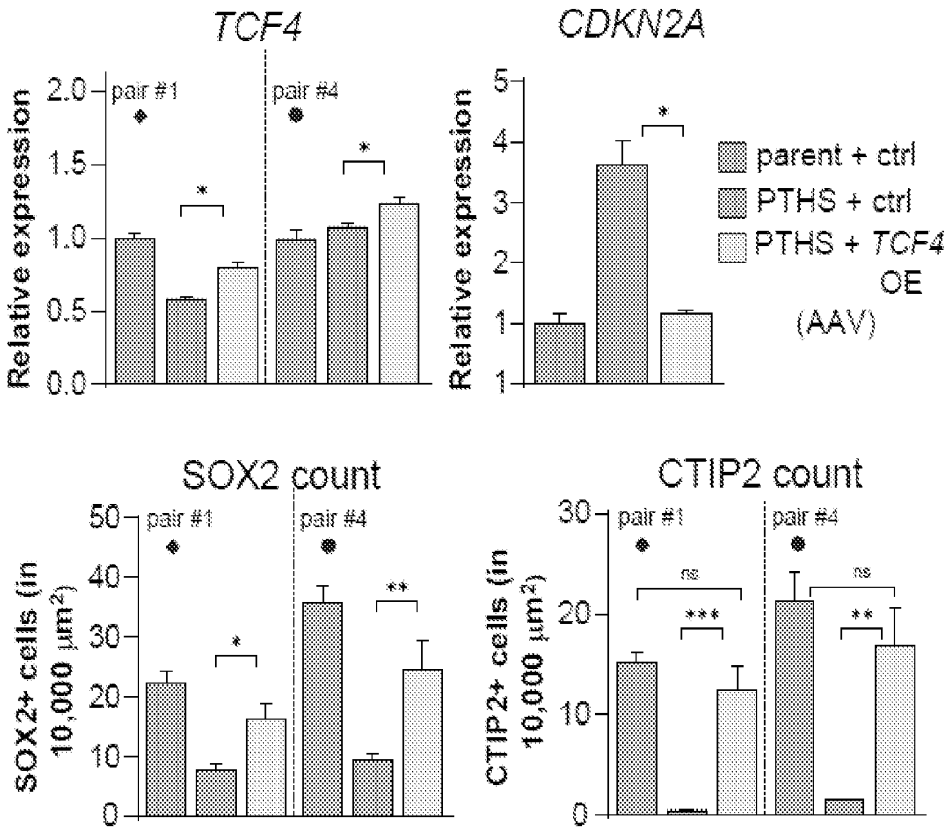


FIG. 18N

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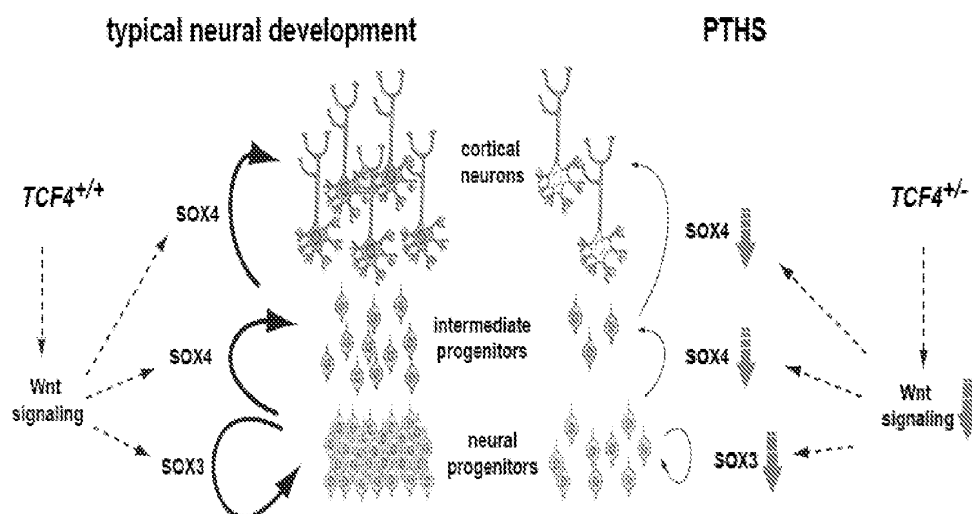


FIG. 180