

A *Nlrp3* (NC_005109.4)

gagggctcaacttctaggaggatccatggagctgaggcaacagtcagcaagaaccctggagatgacagaaagaaagat
gtgaggtgctgcagga(-1027)aactggagaggtggtgcaagaacggacacaaaacagggatggtgagcttgagg
cacctgaatgtcacctt(-1097)gcc.....tcc(-464)aggtcccagactcatcaccatgggttctggtctacacgg
gtcccggtgacctgtgtgtgctgtctctgcacgccgtatctggtt(-378)gtg.....ctg[atg](0) aagatgatgagtg

B *Rela* (NC_051336.1)

aatgttaagaacttctctgagttgccatctctagcccttatttttcagtaagtacactcatgttcatattaattgcaactatat
gtcagttttta(-1295)aaagtgggttcgtgcgaggatcaatgatggctgtgtgccattaatcggagaccataattcattct
gtcaccttgatgtccgc(-1214)ccc.....gac(-765)ctatctgtggaggcgaagccctggagctcttcacgattca
ttgctctcagggacitctagaggtacaggtgtctacctcgggccctctacac(-671)caa.....gcc[atg](0)gac

D *Gabrb3* (NC_051336.1)

atgcgagtttatcgacaagatttctctttacggttcattatga(-1372)atgcgtttacgtgagcaggaaggattcagcactc
atatggtgtgcaggagagggcgagcttaaggagactgct(-1279)ttt.....agcctctgcagcttgatacggaccag
gcag(-997)agcgcccaggctccttgcggtgccactggctctcccgcttagcagggcggggtgaaggtggagggg
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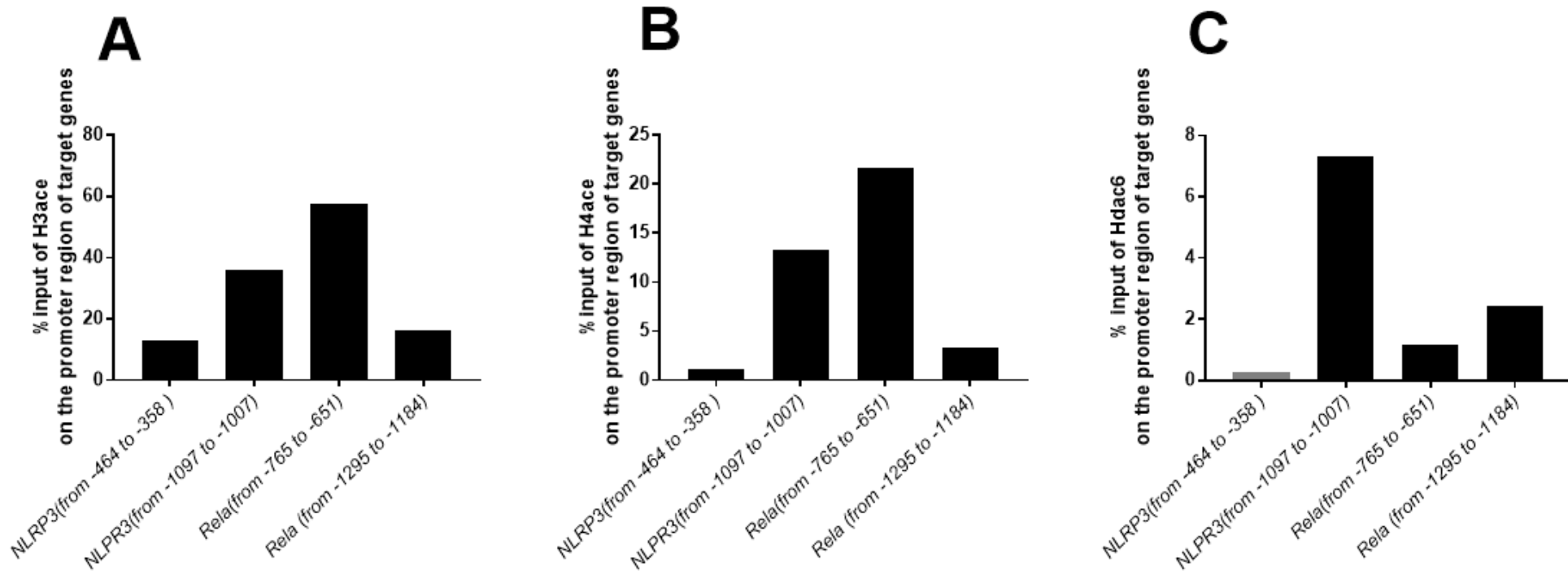
C *Grin2a* (NC_051345.1)

ctgggatagccgcccccggtgggggtgatgcggacagcgcgggacagccaggggagcgcgcgggggccgcagcat
gcg(-1585)ggaacccgctaaacctgggtggtgctgaggcggccgagatgctcgtgcgcgcagcacgccccattgc
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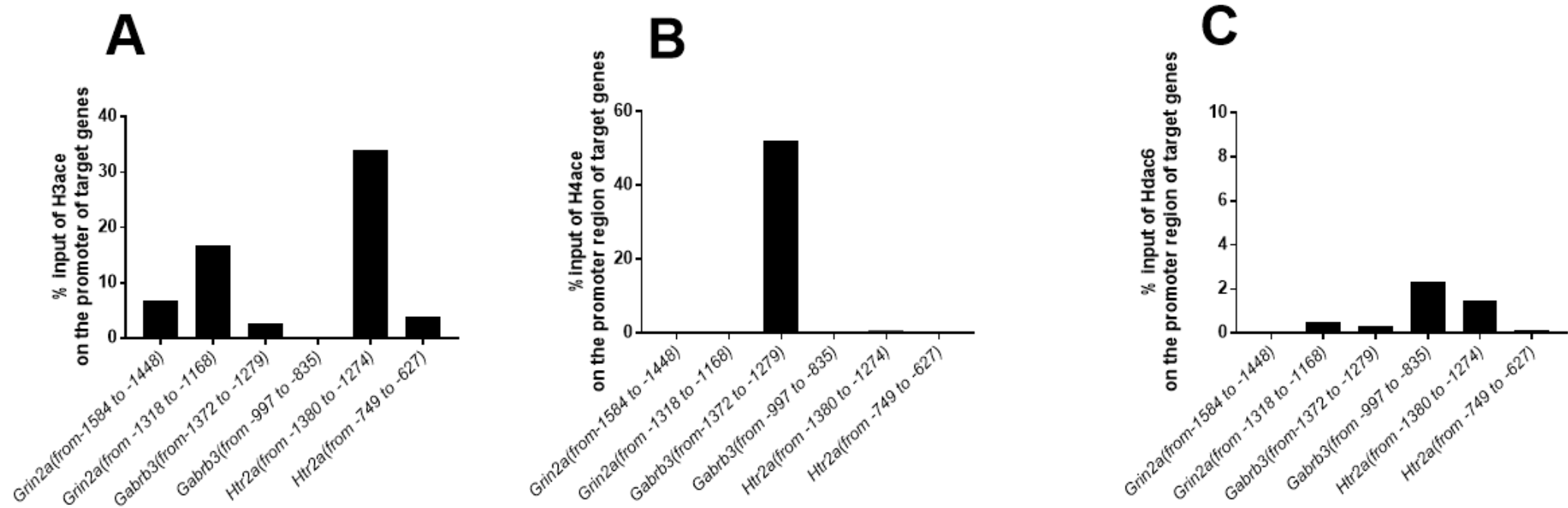
E *Htr2a* (NC_051350.1)

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cctagatcccaggacgtgcggtttttagccttattttttcacacttcgccccctc(-1294)agc.....agg(-749)cg
agtcacaggatagcggaccctggcgacaacgaatgtaagttcctgggtgctgtcttttactgctgtgggattttcttctg
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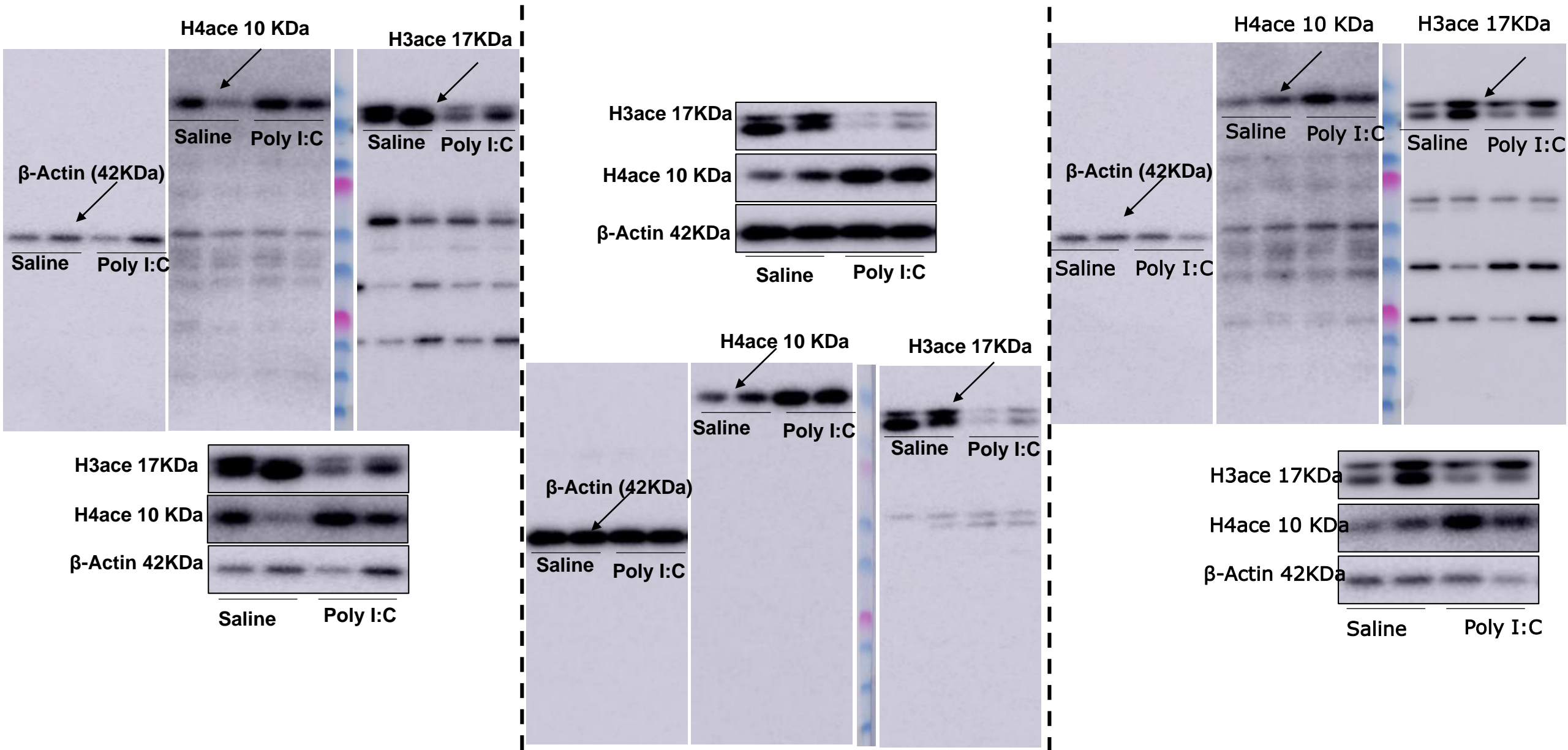
Supplementary Figure 1 Primer design for ChIP-qPCR. (A) *Nlrp3*, (B) *Rela*, (C) *Grin2a*, (D) *Gabrb3*, and (E) *Htr2a*. The red sequence blocked with dotted box is the position of initiation codon. The region of PCR amplification was presented with purple italics, and the extensional direction was indicated by a red arrow. The sequence marked with purple underlines are the PCR primers. The primers were self-designed through the Primer-BLAST in the National Center for Biotechnology Information (NCBI) (<https://www.ncbi.nlm.nih.gov/tools/primer-blast/>).



Supplementary Figure 2 Pre-experiment of ChIP-qPCR for *Nlrp3* and *Rela*. The condition of acetylated histones marking on the specified loci of promoter of target genes involved in neuroinflammation were evaluated by ChIP-qPCR using antibodies of (A) acetylated histone 3 (H3ace), (B) acetylated histone 4 (H4ace), and (C) Hdac6.



Supplementary Figure 3 Pre-experiment of ChIP-qPCR for neurotransmitter receptors (*Grin2a*, *Htr2a*, *Gabrb3*). The condition of acetylated histones marking on the specified loci of promoter of target genes encoding neurotransmitter receptors was evaluated by ChIP-qPCR using antibodies of (A) acetylated histone 3 (H3ace), (B) acetylated histone 4 (H4ace) and (C) Hdac6.



Supplementary Figure 4 Original western blot images of hepatic global H3ace and H4ace (n=6/group. The results were visualized by an Amersham GelImager 600. The molecular weights of H3ace, H4ace and Actin are 17kDa, 10kDa and 43kDa, respectively.