

1. Selection on the regulation of sympathetic nervous activity in humans and chimpanzees

Adrenergic α_2C receptor (ADRA2C) is a regulator of the fight-or-flight response. It has been shown in mice that repression of this gene can result in relevant physiological and behavioral alterations. A strong selection signature in the genomes of domesticated chickens has been reported for this gene, suggesting that less aggression toward humans has been positively selected during chicken domestication. In this work, we analyze the genomes, transcriptomes, and epigenomes of a large number of humans and chimpanzees along with those of other primates to propose that repression of this gene has been positively selected in the evolution of humans and chimpanzees.

