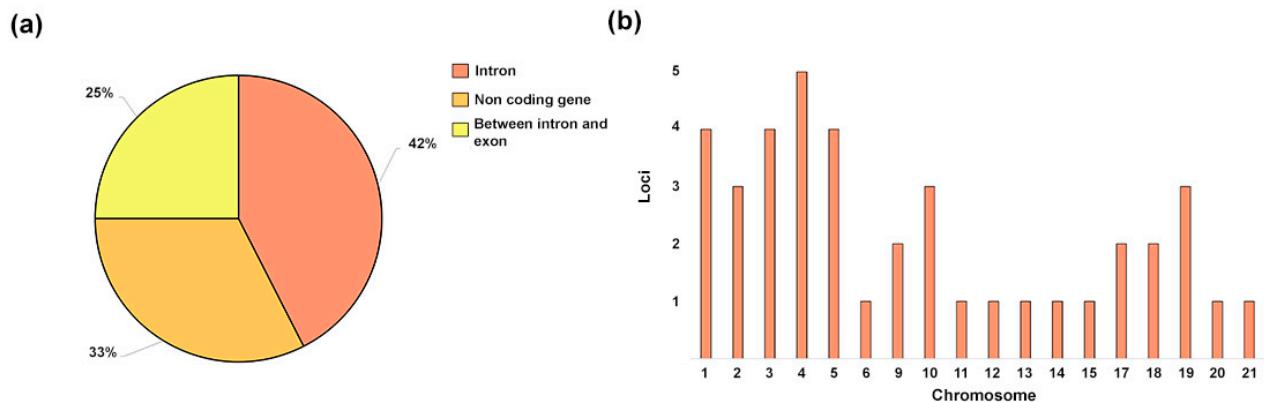


# Characterization of Microsatellite Distribution in Siamese Fighting Fish Genome to Promote Conservation and Genetic Diversity

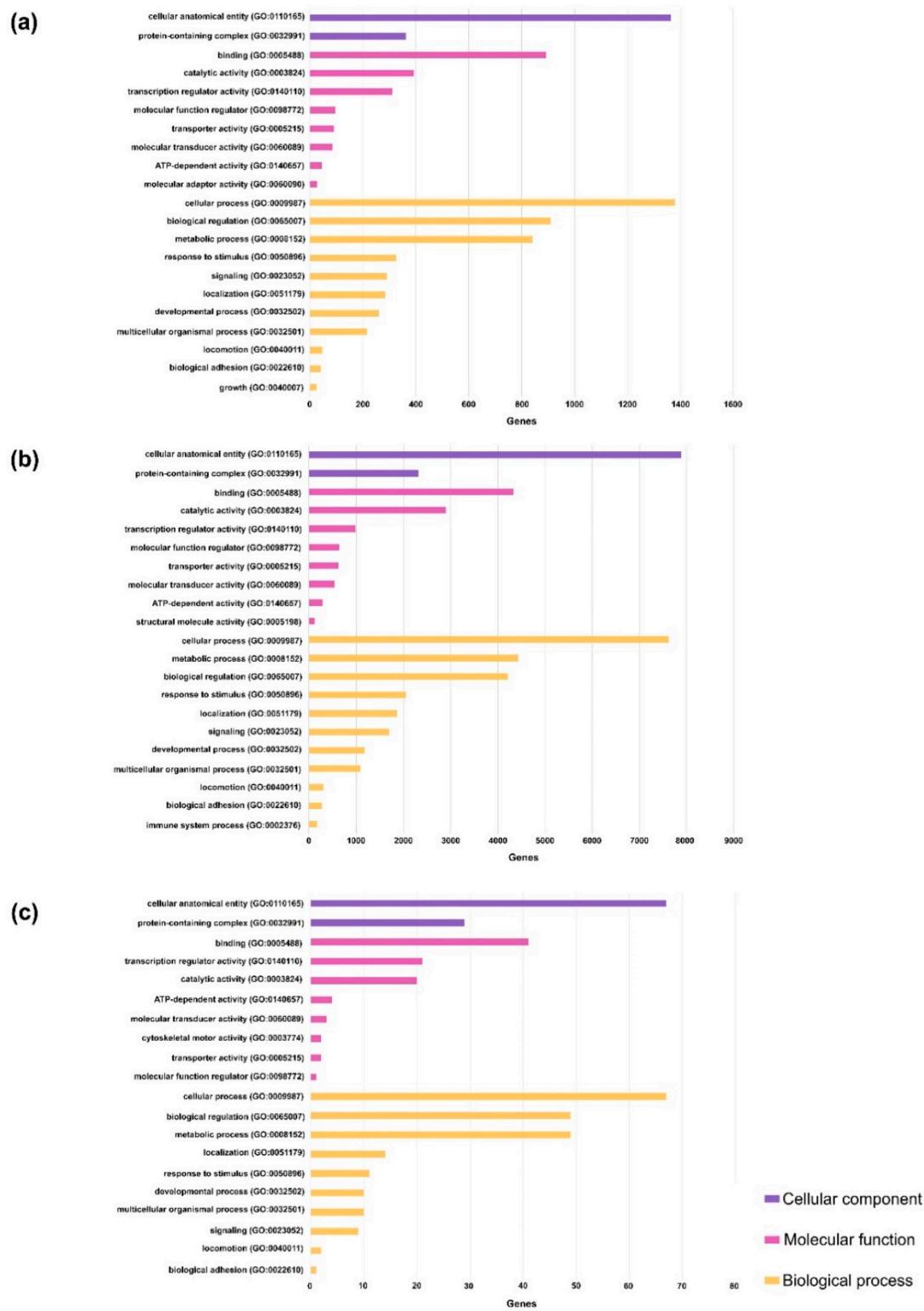
Pish Wattanadilokchatkun <sup>1,2</sup>, Thitipong Panthum <sup>1,3,4</sup>, Kitipong Jaisamut <sup>1,3</sup>, Syed Farhan Ahmad <sup>1,3,5</sup>, Sahabhop Dokkaew <sup>6</sup>, Narongrit Muangmai <sup>1,7</sup>, Prateep Duengkae <sup>1,3</sup>, Worapong Singchat <sup>1,3</sup> and Kornsorn Srikulnath <sup>1,2,3,4,5,8,9,10\*</sup>



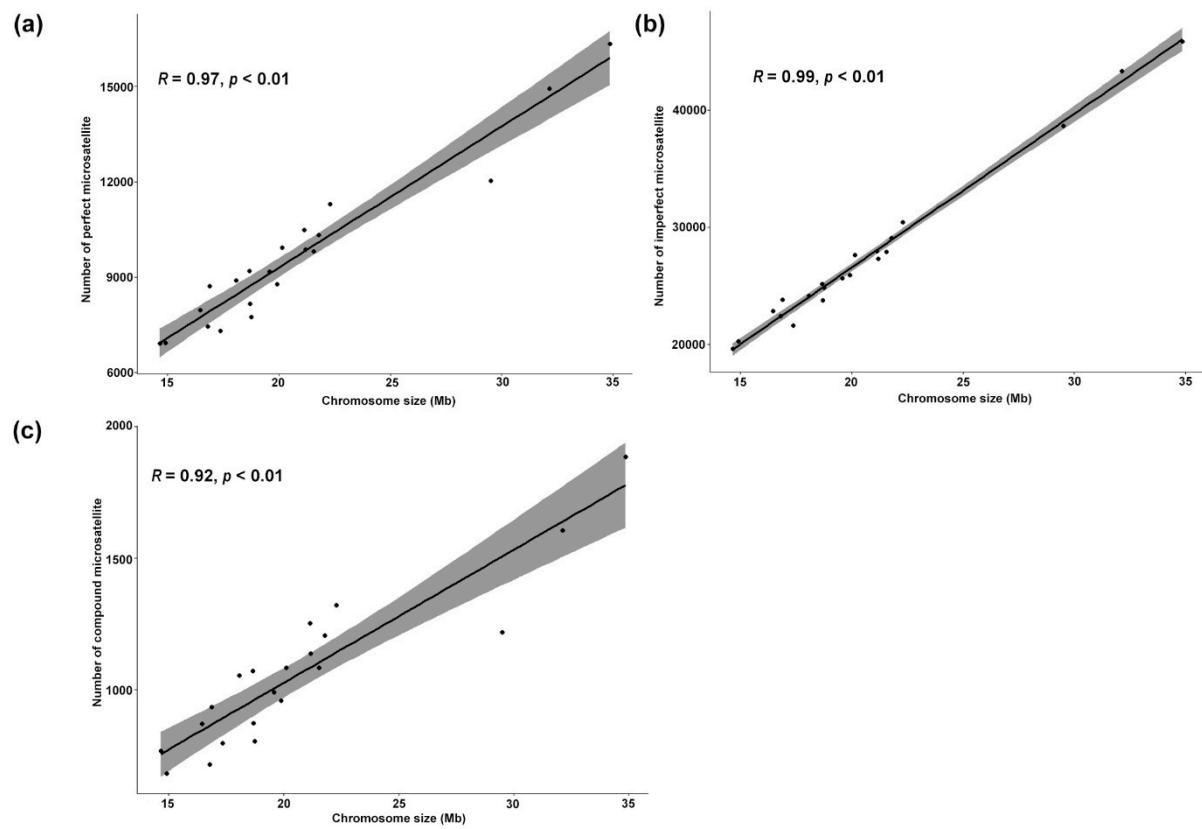
**Figure S1.** Types of microsatellites or simple sequence repeats: perfect microsatellite (a), imperfect microsatellite (b), and compound microsatellite (c).



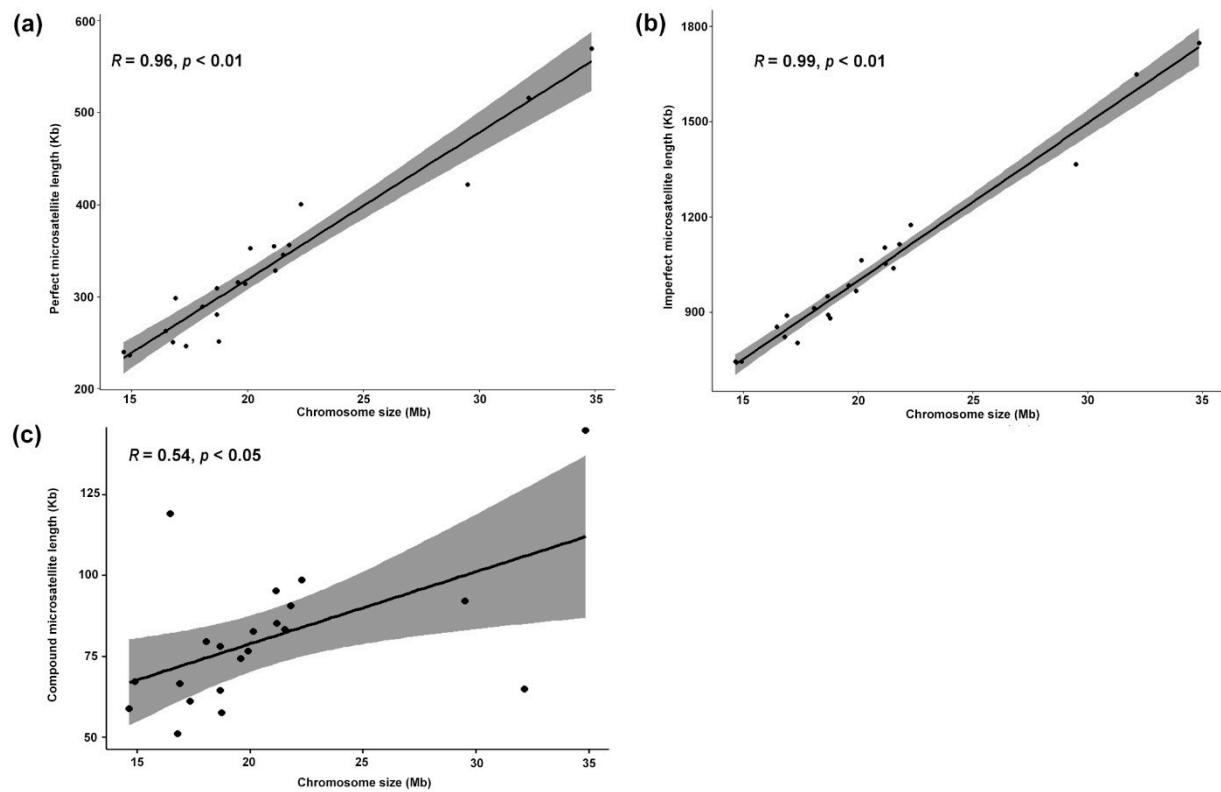
**Figure S2.** Pie chart showing the percentage of primer regions designed in this study (a) and bar chart of the primer loci number on Siamese fighter fish chromosomes (b).



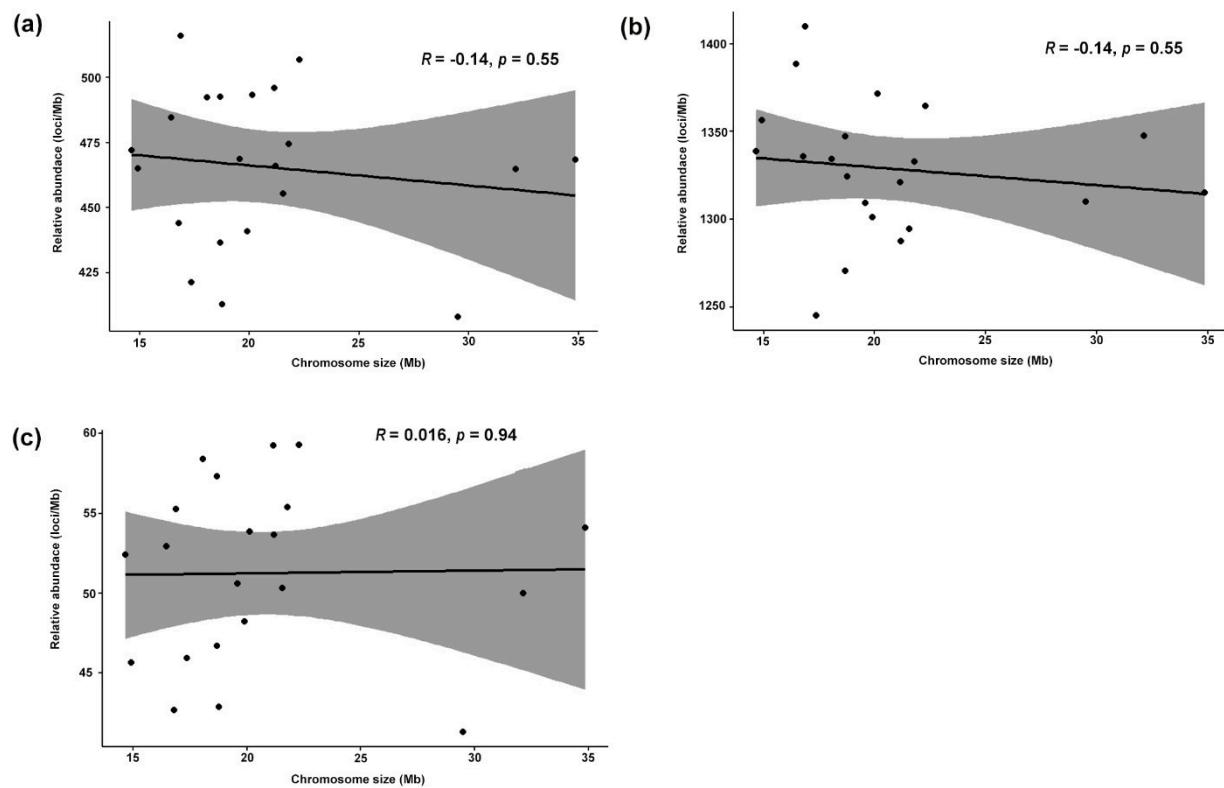
**Figure S3.** Gene ontology (GO) functional classification of genes containing perfect (a), imperfect (b), and compound (c) microsatellites.



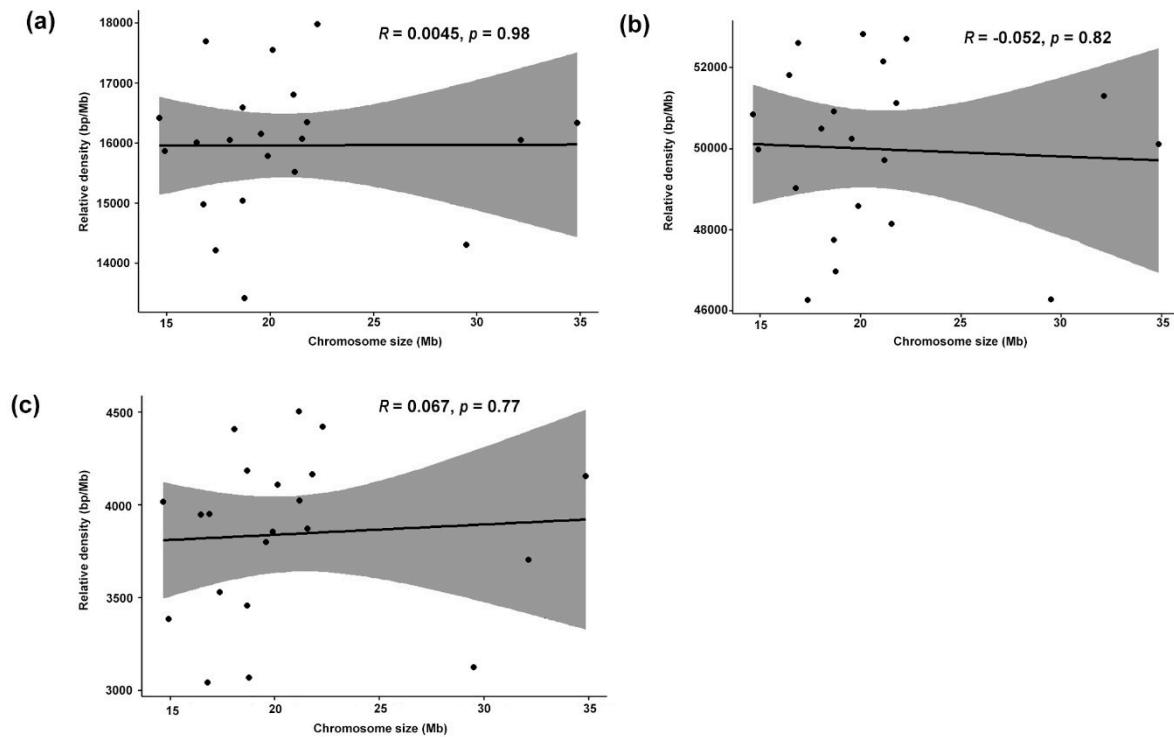
**Figure S4.** Scatter plots showing the correlation ( $R$ ) between chromosome size and numbers of perfect (a), imperfect (b), and compound (c) microsatellites.



**Figure S5.** Scatter plots showing correlation ( $R$ ) between chromosome size and lengths of perfect (a), imperfect (b), and compound (c) microsatellites.



**Figure S6.** Scatter plots showing correlation ( $R$ ) between the total number of microsatellites and the relative abundances of perfect (a), imperfect (b), and compound (c) microsatellites.



**Figure S7.** Scatter plots showing the correlation ( $R$ ) between chromosome size and relative densities of perfect (a), imperfect (b), and compound (c) microsatellites.