

Frequency of Val1016Ile mutation in the voltage gated sodium channel gene of
Aedes aegypti Brazilian populations

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One of the major insect pyrethroid resistance mechanisms affects its target site, the voltage gated sodium channel (Na_v). In *Aedes aegypti*, the Val1016Ile substitution of the *AaNa_v* gene is associated to resistance in several Latin American countries. Genotyping of susceptible and resistant mosquitoes from 7 Brazilian localities detected the Ile1016 mutation in 5 populations, and a higher frequency of this substitution in resistant specimens in all cases. Additionally, 10 out of 16 vector populations presented the Ile1016 mutation. Our data suggest involvement of this substitution with pyrethroid resistance in Brazil.

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