

# Datamonkey

A Collection of State of the Art Statistical Models and Bioinformatics Tools

What evolutionary process would you like to detect?

Selection	Recombination
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Would you like to detect selection across branches, individual sites, or an entire gene?

Branches	Sites	Gene
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Are you concerned about biases introduced by multinucleotide substitutions and variation in synonymous substitution rates?

No	Yes
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Datamonkey recommends that you use...

**BUSTED**

BUSTED (**B**ranched **s**ite **U**nrestricted **S**tatistical **T**est for **E**pisodic **D**iversification) provides a gene-wide (*not site-specific*) test for positive selection by asking whether a gene has experienced positive selection at at least one site on at least one branch.

For more information, please see the [summary on hyphy.org](#) or see [Murrell, B et al. "Gene-wide identification of episodic selection." Mol. Biol. Evol. 32, 1365–1371 \(2015\).](#)

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