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bíogo/hts: high throughput sequence handling for the Go language

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Summary

bíogo/hts provides a Go native implementation of the SAM specification (Group 2016) for SAM and BAM alignment formats (H. et al. 2012) commonly used for representation of high throughput genomic data, the BAI, CSI and tabix indexing formats, and the BGZF blocked compression format. The bíogo/hts packages perform parallelized read and write operations and are able to cache recent reads according to user-specified caching methods. The parallelisation approach used by the bíogo/hts package is influenced by the approach of the D implementation, sambamba by Tarazov et al. (T. A. et al. 2015). The bíogo/hts APIs have been constructed to provide a consistent interface to sequence alignment data and the underlying compression system in order to aid ease of use and tool development.

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