

# Package ‘RhpcBLASctl’

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**Title** Control the Number of Threads on 'BLAS'

**Author** Junji NAKANO <nakanoj@ism.ac.jp> and Ei-ji Nakama <nakama@ki.rim.or.jp>

**Maintainer** Ei-ji Nakama <nakama@ki.rim.or.jp>

**Description** Control the number of threads on 'BLAS' (Aka 'GotoBLAS', 'Open-BLAS', 'ACML', 'BLIS' and 'MKL').

And possible to control the number of threads in 'OpenMP'.

Get a number of logical cores and physical cores if feasible.

**License** AGPL-3

**URL** <https://prs.ism.ac.jp/~nakama/Rhpc/>

**ByteCompile** true

**NeedsCompilation** yes

**Repository** CRAN

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RhpcBLASctl-package     *Control the number of threads on BLAS*

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## Description

Control the number of threads on 'BLAS' (Aka 'GotoBLAS', 'ACML' and 'MKL').

If you build R directly on Windows and the BLAS file name is not 'Rblas.dll', you can give it as 'options("RhpcBLASctl.win.Rblas.name" = "boofoo.dll")'.

openmp-related functions only work at build-time instructions. `Omp_get *` now returns `NA_Integer` if R was not built with openmp instructions. NOTE: if R itself is built without OpenMP instructions and BLAS thread is used with OpenMP, this package will not work...XD

**Usage**

```
get_num_cores()
get_num_procs()
blas_get_num_procs()
blas_set_num_threads(threads)
omp_get_num_procs()
omp_get_max_threads()
omp_set_num_threads(threads)
```

**Arguments**

threads            Number of threads

**Details**

<https://prs.ism.ac.jp/~nakama/Rhpc/>

**Value**

get\_num\_cores    Number of CPU physical processor. NOTE:Returns 1L if unknown  
get\_num\_procs    Number of CPU logical processor. NOTE:Returns 1L if unknown  
blas\_get\_num\_procs  
                  Number of available cores for the optimized BLAS. NOTE:Returns 1L if unknown  
omp\_get\_num\_procs  
                  Result from OpenMP's omp\_get\_num\_procs function. NOTE Returns NA\_integer\_ if unknown  
omp\_get\_max\_threads  
                  Result from OpenMP's omp\_get\_max\_threads function. NOTE Returns NA\_integer\_ if unknown

**Author(s)**

Junji NAKANO <nakanoj@ism.ac.jp> and Ei-ji Nakama<nakama@com-one.com> Maintainer:  
Ei-ji Nakama <nakama@com-one.com>

**Examples**

```
get_num_cores()
get_num_procs()
blas_get_num_procs()
blas_set_num_threads(2)
omp_get_num_procs()
omp_get_max_threads()
omp_set_num_threads(2)
```

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