

# Package ‘hdf5lib’

December 22, 2025

**Type** Package

**Title** Headers and Static Libraries for 'HDF5'

**Version** 2.0.0.4

**Description** 'HDF5' (Hierarchical Data Format 5) is a high-performance library and file format for storing and managing large, complex data. This package provides the static libraries and headers for the 'HDF5' 'C' library (release 2.0.0). It is intended for R package developers to use in the 'LinkingTo' field, which eliminates the need for users to install system-level 'HDF5' dependencies. This build is compiled with thread-safety enabled and supports dynamic loading of external compression filters. 'HDF5' is developed by 'The HDF Group' <<https://www.hdfgroup.org/>>.

**URL** <https://github.com/cmmr/hdf5lib>, <https://cmmr.github.io/hdf5lib/>

**BugReports** <https://github.com/cmmr/hdf5lib/issues>

**License** MIT + file LICENSE

**Encoding** UTF-8

**Depends** R (>= 4.2.0)

**NeedsCompilation** yes

**Suggests** knitr, rmarkdown, testthat (>= 3.0.0)

**Config/testthat/edition** 3

**RoxygenNote** 7.3.3

**Config/Needs/website** rmarkdown

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**Repository** CRAN

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| c_flags | <i>Get C/C++ Compiler Flags for hdf5lib</i> |
|---------|---------------------------------------------|

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## Description

Provides the required C/C++ compiler flags to find the HDF5 header files bundled with the hdf5lib package.

## Usage

```
c_flags(api = "latest")
```

## Arguments

|     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|-----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| api | A numeric value specifying the HDF5 API version to use (e.g., 114 for v1.14), or the string "latest". This adds a preprocessor directive like <code>-DH5_USE_114_API_DEFAULT</code> to ensure that the compiled code uses symbols compatible with a specific version of the HDF5 API. This is useful for maintaining compatibility with older HDF5 versions. Supported values are 200, 114, 112, 110, 18, and 16. Defaults to "latest", which corresponds to the newest supported API version. |
|-----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

## Value

A scalar character vector containing the compiler flags (e.g., the `-I` path to the package's `inst/include` directory).

## See Also

[ld\\_flags\(\)](#)

## Examples

```
c_flags()
c_flags(api = "114")
```

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`ld_flags`*Get C/C++ Linker Flags for hdf5lib*

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**Description**

Provides the required linker flags to link against the static HDF5 library (libhdf5z.a) bundled with the hdf5lib package.

**Usage**

```
ld_flags(api = "latest")
```

**Arguments**

|                  |                                                                                                                                                                                                                      |
|------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <code>api</code> | A numeric value or the string "latest". This parameter is included for consistency with <code>c_flags()</code> and is reserved for future use; it currently has no effect on the linker flags. Defaults to "latest". |
|------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

**Value**

A scalar character vector containing the linker flags.

**See Also**

`c_flags()`

**Examples**

```
ld_flags()
```

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