

# Package: wikiprofiler (via r-universe)

August 27, 2024

**Type** Package

**Title** 'WikiPathway' Based Data Integration and Visualization

**Version** 0.1.5

**Description** Queries online 'WikiPathway' graphics and allows mapping user data (e.g., expression values) on the graph. The package designs a grammar of graphic syntax that using pipe operator to add graphic layer.

**Imports** ggplot2, ggplotify, grDevices, grid, gson, rsvg, yulab.utils  
(>= 0.1.7)

**ByteCompile** true

**License** Artistic-2.0

**URL** <https://yulab-smu.top/contribution-knowledge-mining/>

**BugReports** <https://github.com/YuLab-SMU/wikiprofiler/issues>

**Encoding** UTF-8

**Roxygen** list(markdown = TRUE)

**RoxygenNote** 7.3.2

**Repository** <https://yulab-smu.r-universe.dev>

**RemoteUrl** <https://github.com/yulab-smu/wikiprofiler>

**RemoteRef** HEAD

**RemoteSha** 00f29ea021206242f60944b5f4b3f11ec7effc2a

## Contents

read.wp . . . . .	2
wplot . . . . .	2
wpsave . . . . .	3
wp_bgfill . . . . .	3
wp_shadowtext . . . . .	4

<b>Index</b>	<b>5</b>
--------------	----------

read.wp                      *read.wp*

---

**Description**

parse wikipathway gmt file to a gson object

**Usage**

```
read.wp(file)
```

**Arguments**

file                      wikipathway gmt file downloaded from 'https://wikipathways-data.wmcloud.org/current/gmt/'

**Value**

a 'gson' object

**Author(s)**

Guangchuang Yu

---

wpplot                      *Input specific wikipathways ID to get an output in class of wpplot.*

---

**Description**

Use wikipathways ID to open a local svg file. Then extract related information from svg file and build a wpplot class variance.

**Usage**

```
wpplot(ID)
```

**Arguments**

ID                      ID is wikipathways' ID.

**Value**

A 'wpplot' object

**Examples**

```
if (yulab.utils::has_internet())  
  wpplot('WP179')
```

---

wpsave	<i>Save the 'wplot' object to a file.</i>
--------	---

---

**Description**

Save the 'wplot' object to a file.

**Usage**

```
wpsave(p, file, width = NULL, height = NULL, ...)
```

**Arguments**

p	A 'wplot' object
file	the file to save the object
width	Width of the figure
height	Height of the figure
...	additional parameter passed to 'ggsave'

**Value**

output the file and the input 'wplot' object (invisible)

---

wp_bgfill	<i>Fill the background of gene with color according to amount of gene expression.</i>
-----------	---

---

**Description**

Generate a color array.Fill the gene then generate the legend.

**Usage**

```
wp_bgfill(
  p,
  value,
  high = "red",
  low = "blue",
  legend = TRUE,
  legend_x = 0.001,
  legend_y = 0.94
)
```

**Arguments**

p	p is
value	value is the amount of expression.
high	The color of highest gene.
low	The color of lowest gene.
legend	Whether you need legend.
legend_x	horizontal position of the legend
legend_y	vertical position of the legend

**Value**

A 'wplot' object

---

wp_shadowtext	<i>Add halo above gene name to get a clear view.</i>
---------------	--

---

**Description**

Add use svghalo2 function to add halo.

**Usage**

```
wp_shadowtext(p, bg.r = 2, bg.col = "white")
```

**Arguments**

p	An wplot class variance.
bg.r	The width of halo.
bg.col	The color of halo.

**Value**

A 'wplot' object

# Index

`read.wp`, 2

`wp_bgfill`, 3

`wp_shadowtext`, 4

`wplot`, 2

`wpsave`, 3