

Package: gDRimport (via r-universe)

May 29, 2026

Type Package

Title Package for handling the import of dose-response data

Version 1.10.0

Date 2026-04-23

Description The package is a part of the gDR suite. It helps to prepare raw drug response data for downstream processing. It mainly contains helper functions for importing/loading/validating dose-response data provided in different file formats.

License Artistic-2.0

LazyLoad yes

Depends R (>= 4.2)

Imports assertthat, BumpyMatrix, checkmate, CoreGx, PharmacoGx, data.table, futile.logger, gDRutils (>= 1.7.1), magrittr, methods, MultiAssayExperiment, readxl, rio, S4Vectors, stats, stringi, SummarizedExperiment, tibble, tools, utils, XML, yaml, openxlsx, qs2

Suggests BiocStyle, gDRtestData (>= 1.7.1), gDRstyle (>= 1.7.1), knitr, purrr, testthat

URL <https://github.com/gdrplatform/gDRimport>,
<https://gdrplatform.github.io/gDRimport/>

BugReports <https://github.com/gdrplatform/gDRimport/issues>

biocViews Software, Infrastructure, DataImport

VignetteBuilder knitr

ByteCompile TRUE

Roxygen list(markdown = TRUE)

RoxygenNote 7.3.3

SwitchrLibrary gDRimport

DeploySubPath gDRimport

Encoding UTF-8

Config/pak/sysreqs cmake libglib-dev make libicu-dev libuv1-dev libxml2-dev libssl-dev libnode-dev libx11-dev zlib1g-dev

Repository <https://bioc-release.r-universe.dev>

Date/Publication 2026-04-28 13:00:59 UTC

RemoteUrl <https://github.com/bioc/gDRimport>

RemoteRef RELEASE_3_23

RemoteSha 4c07ceeeac156d53aed5385d190786e6d5d31b4

Contents

.check_against_single_template_sheet	3
are_template_sheets_valid	4
check_metadata_against_spaces	4
check_metadata_field_names	5
check_metadata_headers	5
check_metadata_names	6
check_metadata_req_col_names	6
convert_LEVEL5_prism_to_gDR_input	7
convert_LEVEL6_prism_to_gDR_input	8
convert_MAE_to_PSet	9
convert_pset_to_df	9
correct_template_sheets	10
detect_file_format	11
enhance_raw_edited_EnVision_df	11
fix_typos_with_reference	12
gdr_test_data-class	12
get_df_from_raw_edited_EnVision_df	13
get_df_from_raw_unedited_EnVision_df	14
get_EnVision_properties	14
get_excel_sheet_names	15
get_exception_data	15
get_expected_template_sheets	16
get_plate_info_from_template_xlsx	16
get_test_D300_data	17
get_test_data	17
get_test_EnVision_data	18
get_test_Tecan_data	18
get_test_tsv_data	19
get_xl_sheets	19
getPSet	20
import_D300	21
is_readable_v	22
load_data	22
load_manifest	23
load_results	24

- load_results_EnVision 24
- load_results_EnVision_new 25
- load_results_Incucyte 25
- load_results_Tecan 26
- load_results_tsv 26
- load_templates 27
- load_templates_tsv 27
- load_templates_xlsx 28
- manifest_path 28
- mgrepl 29
- parse_D300_xml 29
- read_EnVision_delim 30
- read_EnVision_xlsx 30
- read_excel_to_dt 31
- read_in_EnVision_file 31
- read_in_manifest_file 32
- read_in_result_files 32
- read_in_results_Tecan 33
- read_in_template_sheet_xlsx 33
- read_in_template_xlsx 34
- read_in_tsv_template_files 34
- read_ref_data 35
- result_path 35
- save_drug_info_per_well 36
- setEnvForPSet 36
- standardize_record_values 37
- template_path 37
- validate_template_xlsx 38

Index **39**

.check_against_single_template_sheet

Evaluate if template file with single sheet is present, if the name of the sheet is correct and if it can be fixed

Description

get sheets for given set of XLS files

Usage

.check_against_single_template_sheet(ts)

Arguments

ts list with template sheets info

Value

logical flag

are_template_sheets_valid

are template sheet valid?

Description

are template sheet valid?

Usage

are_template_sheets_valid(ts)

Arguments

ts list with (per file) template sheets

Value

logical flag

See Also

get_xl_sheets

check_metadata_against_spaces

Check metadata against spaces

Description

Check metadata against spaces

Usage

check_metadata_against_spaces(corrected_names, df_name)

Arguments

corrected_names

a charvec with corrected colnames of df

df_name

a name of data.table ("" by default)

Value

a charvec with corrected colnames of df

check_metadata_field_names
Check metadata field names

Description

Check metadata field names

Usage

```
check_metadata_field_names(corrected_names, df_name)
```

Arguments

corrected_names
a charvec with corrected colnames of df

df_name
a name of data.table (" " by default)

Value

a charvec with corrected colnames of df

check_metadata_headers
Check whether metadata headers are correct and make fixes if needed

Description

Check whether metadata headers are correct and make fixes if needed

Usage

```
check_metadata_headers(corrected_names, df_name)
```

Arguments

corrected_names
a charvec with corrected colnames of df

df_name
a name of data.table (" " by default)

Value

a charvec with corrected colnames of df

check_metadata_names *check_metadata_names*

Description

Check whether all metadata names are correct

Usage

```
check_metadata_names(col_df, df_name = "", df_type = NULL)
```

Arguments

col_df	a character with colnames of df
df_name	a name of data.table (" " by default)
df_type	a type of a data.table (NULL by default)

Value

a charvec with corrected colnames of df

Examples

```
td <- get_test_data()
m_file <- manifest_path(td)
m_data <- read_excel_to_dt(m_file)
result <- check_metadata_names(col_df = colnames(m_data))
```

check_metadata_req_col_names

Check metadata for required column names

Description

Check metadata for required column names

Usage

```
check_metadata_req_col_names(col_df, df_name, df_type)
```

Arguments

col_df	a charvec with corrected colnames of df
df_name	a name of data.table (" " by default)
df_type	a type of a data.table (NULL by default)

Value

NULL invisibly.

convert_LEVEL5_prism_to_gDR_input

Load, convert and process the level 5 PRISM data into a gDR input

Description

Load, convert and process the level 5 PRISM data into a gDR input

Usage

```
convert_LEVEL5_prism_to_gDR_input(  
  prism_data_path,  
  meta_data_path,  
  readout_min = 1.03  
)
```

Arguments

prism_data_path path to PRISM LEVEL5 csv file with data

meta_data_path path to metadata file describing all cancer models/cell lines which are referenced by a dataset contained within the DepMap portal

readout_min minimum ReadoutValue

Value

data.table object with input data for gDR pipeline

Examples

```
prism_data <- system.file("testdata/prism_sa.csv", package = "gDRimport")  
prism_meta <- system.file("testdata/prism_model.csv", package = "gDRimport")  
convert_LEVEL5_prism_to_gDR_input(prism_data, prism_meta)
```

`convert_LEVEL6_prism_to_gDR_input`*Load, convert and process the level 6 PRISM data into a gDR input*

Description

Load, convert and process the level 6 PRISM data into a gDR input

Usage

```
convert_LEVEL6_prism_to_gDR_input(  
  prism_data_path,  
  cell_line_data_path,  
  treatment_data_path,  
  meta_data_path,  
  readout_min = 1.03  
)
```

Arguments

<code>prism_data_path</code>	path to PRISM LEVEL6 csv file with collapsed log fold change data
<code>cell_line_data_path</code>	path to cell line info data
<code>treatment_data_path</code>	path to collapsed treatment info data
<code>meta_data_path</code>	path to metadata file describing all cancer models/cell lines which are referenced by a dataset contained within the DepMap portal
<code>readout_min</code>	minimum ReadoutValue

Value

data.table object with input data for gDR pipeline

Examples

```
prism_data_path <- system.file("testdata/prism_collapsed_LOGFC.csv", package = "gDRimport")  
cell_line_data_path <- system.file("testdata/prism_cell_lines.csv", package = "gDRimport")  
treatment_data_path <- system.file("testdata/prism_treatment.csv", package = "gDRimport")  
prism_meta <- system.file("testdata/prism_model.csv", package = "gDRimport")  
convert_LEVEL6_prism_to_gDR_input(prism_data_path, cell_line_data_path, treatment_data_path, prism_meta)
```

convert_MAE_to_PSet *Convert MultiAssayExperiment to TreatmentResponseExperiment*

Description

This function converts a MultiAssayExperiment generated by gDR into a TreatmentResponseExperiment for use in the PharmacoGx package. The resulting PharmacoSet can be used for pharmacogenomic analysis of drug response.

Usage

```
convert_MAE_to_PSet(mae, pset_name)
```

Arguments

mae A MultiAssayExperiment object generated by gDR.
pset_name A character string specifying the name of the resulting PharmacoSet object.

Value

A PharmacoSet object.

Examples

```
# Convert a MultiAssayExperiment object to a PharmacoSet object
m <- 20
n <- 10
rnames <- LETTERS[1:m]
cnames <- letters[1:n]
ref_gr_value <- matrix(runif(m * n), nrow = m, ncol = n, dimnames = list(rnames, cnames))
se <- SummarizedExperiment::SummarizedExperiment(assays = list(RefGRvalue = ref_gr_value),
                                                  rowData = S4Vectors::DataFrame(rnames),
                                                  colData = S4Vectors::DataFrame(cnames))
mae <- MultiAssayExperiment::MultiAssayExperiment(experiments = list("single-agent" = se))
convert_MAE_to_PSet(mae, "my_pset")
```

convert_pset_to_df *Convert a PharmacoSet to a data.table that is prepare for input into gDR pipeline*

Description

Convert a PharmacoSet to a data.table that is prepare for input into gDR pipeline

Usage

```
convert_pset_to_df(pharmacoset, run_parallel = TRUE, workers = 2L)
```

Arguments

pharmacoset	PharmacoSet object
run_parallel	logical, TRUE (default) if to run functions in Parallel, FALSE to run in serial
workers	integer, number of workers defaults to 2L if run_parallel is TRUE

Value

data.table of PharmacoSet's dose response data with column names aligned with gDR standard

Author(s)

Jermiah Joseph – collaboration with BHKLab

Examples

```
pset <- suppressMessages(getPSet(
  "Tavor_2020",
  psetDir = system.file("extdata/pset", package = "gDRimport"),
  use_local_PSets_list = TRUE
))
dt <- convert_pset_to_df(pset)
gDRutils::reset_env_identifiers()
```

correct_template_sheets

Correct names of the template sheets (if required)

Description

Correct names of the template sheets (if required)

Usage

```
correct_template_sheets(tfiles)
```

Arguments

tfiles	charvec with paths to template files
--------	--------------------------------------

Value

charvec with paths to corrected sheet names

detect_file_format *Detect format of results data*

Description

Detect format of results data

Usage

```
detect_file_format(results_file)
```

Arguments

results_file path to results data

Value

string of the detected file format

Examples

```
td2 <- get_test_Tecan_data()
detect_file_format(td2$r_files[1])
```

enhance_raw_edited_EnVision_df
Enhance raw edited EnVision data.table

Description

Enhance raw edited EnVision data.table

Usage

```
enhance_raw_edited_EnVision_df(df, barcode_col, headers)
```

Arguments

df raw data.table
barcode_col column number for barcode data
headers list with the headersa

Value

data.table derived from EnVision data

 fix_typos_with_reference

Fix typos using reference data

Description

Fix typos using reference data Evaluate given list of ids and try to update them

Usage

```
fix_typos_with_reference(
  data,
  ref,
  method = c("exact", "grepl", "adist"),
  fix_underscores = FALSE
)
```

Arguments

data	list of charvec(s) or charvec with data
ref	charvec with reference data
method	charvec type of the method to be used 'exact' is used to find identical entries from 'ref' in the data (after corrections and uppercase'ing) 'grepl' is used to find entries from 'ref' that might be somehow pre- or post- fixed
fix_underscores	logical flag fix the issues with underscores in data identifiers?

Value

list or charvec with corrected data

gdr_test_data-class *gDR Test Data object*

Description

Object class gdr_test_data is build by function [get_test_data\(\)](#)

Value

object class gdr_test_data with primary test data

Slots

manifest_path character, path to manifest file
 result_path character, path(s) to results file
 template_path character, path(s) to data.table with template data
 ref_m_df character, data.table with manifest data
 ref_r1_r2 character, path to reference file with raw data for treated & untreated
 ref_r1 character, path to reference file with raw data for treated
 ref_t1_t2 character, path to reference template file with treated & untreated data
 ref_t1 character, path to reference template file with treated data

get_df_from_raw_edited_EnVision_df

Get final results (as a data.table) from raw edited EnVision data.table

Description

Get final results (as a data.table) from raw edited EnVision data.table

Usage

```

get_df_from_raw_edited_EnVision_df(
  df,
  barcode_idx,
  barcode_col,
  n_row,
  n_col,
  fname,
  sheet_name,
  headers
)

```

Arguments

df	raw data.table
barcode_idx	numeric vector with barcode indices
barcode_col	column number for barcode data
n_row	number of rows
n_col	number of columns
fname	file name
sheet_name	name of the Excel sheet
headers	list with the headers

Value

data.table derived from EnVision data

get_df_from_raw_unedited_EnVision_df

Get final results (as a data.table) from raw unedited EnVision data.table

Description

Get final results (as a data.table) from raw unedited EnVision data.table

Usage

```
get_df_from_raw_unedited_EnVision_df(df, n_row, n_col, barcode_col)
```

Arguments

df	raw data.table
n_row	number of rows
n_col	number of columns
barcode_col	column number for barcode data

Value

data.table derived from EnVision data

get_EnVision_properties

Get properties of EnVision data

Description

This function return properties of EnVision data

Usage

```
get_EnVision_properties(results.list, fname)
```

Arguments

results.list	list with EnVision data
fname	name of the input file

Value

list with EnVision propertiesa

`get_excel_sheet_names` *get Excel sheets names for a charvec of files for non-Excel files return 0*

Description

get Excel sheets names for a charvec of files for non-Excel files return 0

Usage

`get_excel_sheet_names(fls)`

Arguments

`fls` charvec with file paths

Value

list with one element per file with sheet names or 0 (for non-Excel file)

`get_exception_data` *get exception data*

Description

get exception data

Usage

`get_exception_data(status_code = NULL)`

Arguments

`status_code` A numeric value

Value

A data.table row with exception data or all exceptions

Examples

```
get_exception_data(1)
get_exception_data()
```

get_expected_template_sheets

Get names of the sheets expected in templates xlsx

Description

Get names of the sheets expected in templates xlsx

Usage

```
get_expected_template_sheets(type = c("all", "core", "optional"))
```

Arguments

type charvec type of the sheets

Value

string with type of the sheets

get_plate_info_from_template_xlsx

Get plate info from template xlsx

Description

Get plate info from template xlsx

Usage

```
get_plate_info_from_template_xlsx(template_file, Gnumber_idx, idx)
```

Arguments

template_file character, file path(s) to template(s)

Gnumber_idx index with Gnumber data

idx template file index

Value

list with plate info

get_test_D300_data *get test D300 data*

Description

get test D300 data

Usage

`get_test_D300_data()`

Value

list with with input data (manifest/template/result paths) and related reference data (qs2 file paths)

Examples

`get_test_D300_data()`

get_test_data *get primary test data*

Description

get primary test data

Usage

`get_test_data()`

Value

object class "gdr_test_data" with with input data (manifest/template/result paths) and related reference data (qs2 file paths)

Examples

`get_test_data()`

`get_test_EnVision_data`*get test EnVision data*

Description

get test EnVision data

Usage

```
get_test_EnVision_data()
```

Value

list with with input data (manifest/template/result paths) and related reference data (.qs2 file paths)

Examples

```
get_test_EnVision_data()
```

`get_test_Tecan_data` *get test Tecan data*

Description

get test Tecan data

Usage

```
get_test_Tecan_data()
```

Value

list with with input data (manifest/template/result paths) and related reference data (qs2 file paths)

Examples

```
get_test_Tecan_data()
```

`get_test_tsv_data` *get test tsv data*

Description

get test tsv data

Usage

`get_test_tsv_data()`

Value

list with with input data (manifest/template/result paths) and related reference data (.qs2 file paths)

Examples

`get_test_tsv_data()`

`get_xl_sheets` *Get Excel sheets*

Description

get sheets for given set of XLS files

Usage

`get_xl_sheets(files)`

Arguments

files charvec with file paths

Value

named list where names are the excel filenames and the values are the sheets within each file

getPSet	<i>Get PharmacoSet</i>
---------	------------------------

Description

Get PharmacoSet

Usage

```
getPSet(  
  pset_name,  
  psetDir = getwd(),  
  canonical = FALSE,  
  timeout = 600,  
  use_local_PSets_list = FALSE  
)
```

Arguments

pset_name	string with the name of the PharmacoSet
psetDir	string with the temporary directory for the PharmacoSet
canonical	logical flag indicating if the PSet canonical
timeout	maximum number of seconds allowed for PSet download
use_local_PSets_list	logical flag if PSets list should be used from local. If FALSE PSets list will be taken from web.

Value

PharmacoSet object

Examples

```
suppressMessages(getPSet(  
  "Tavor_2020",  
  psetDir = system.file("extdata/pset", package = "gDRimport"),  
  use_local_PSets_list = TRUE  
))
```

import_D300
*Import D300***Description**

This functions takes a D300 file and generates corresponding template files

Usage

```
import_D300(D300_file, destination_path, metadata_file = NULL, day0 = FALSE)
```

Arguments

D300_file	character, file path to D300 file
destination_path	character, path to folder where template files will be generated
metadata_file	character, file path to file with mapping from D300 names to Gnumbers. Defaults to NULL.
day0	logical, if TRUE, creates a template file for Day 0 data filled with vehicles in addition to the standard plates. Defaults to FALSE.

Details

For example, wells treated with 2 drugs in combination will result in 4 sheets per plate.

- Sheet 1: Drug 1
- Sheet 2: Conc of Drug 1
- Sheet 3: Drug 2
- Sheet 4: Conc of Drug 2

Value

Create one Excel file per plate. Each sheet in each plate file describes the drugs and corresponding concentrations of what was tested in each well.

Examples

```
td3 <- get_test_D300_data()[["f_96w"]]
o_path <- file.path(tempdir(), "td3")
dir.create(o_path)
import_D300(td3$d300, o_path, td3$Gnum)
list.files(o_path)
unlink(o_path, recursive = TRUE)
```

is_readable_v	<i>is_readable_v</i> Check if all paths in vector are readable
---------------	--

Description

is_readable_v Check if all paths in vector are readable

Usage

```
is_readable_v(paths)
```

Arguments

paths a character with path(s)

Value

NULL invisibly.

Examples

```
td2 <- get_test_Tecan_data()
is_readable_v(td2$r_files)
```

load_data	<i>Load data</i>
-----------	------------------

Description

This functions loads and checks the data file(s)

Usage

```
load_data(
  manifest_file,
  df_template_files,
  results_file,
  instrument = "EnVision"
)
```

Arguments

manifest_file character, file path(s) to manifest(s)
df_template_files data.table, with datapaths and names of results file(s) or character with file path of templates file(s)
results_file data.table, with datapaths and names of results file(s) or character with file path of results file(s)
instrument character

Value

a list with three data.tables for manifest/treatment and results

Examples

```
td <- get_test_data()
l_tbl <- load_data(manifest_path(td), template_path(td), result_path(td))
```

load_manifest	<i>Load manifest</i>
---------------	----------------------

Description

This functions loads and checks the manifest file(s)

Usage

```
load_manifest(manifest_file)
```

Arguments

manifest_file character, file path(s) to manifest(s)

Value

list with manifest data.table and headers

Examples

```
td <- get_test_data()
ml <- load_manifest(manifest_path(td))
```

load_results	<i>Load results</i>
--------------	---------------------

Description

This functions loads and checks the results file(s)

Usage

```
load_results(
  df_results_files,
  instrument = "EnVision",
  headers = gDRutils::get_env_identifiers()
)
```

Arguments

df_results_files	data.table, with datapaths and names of results file(s) or character with file path of results file(s)
instrument	character
headers	list of headers identified in the manifest file

Value

data.table with results' data

Examples

```
td <- get_test_data()
r_df <- load_results(result_path(td))
```

load_results_EnVision	<i>Load EnVision results from xlsx</i>
-----------------------	--

Description

This functions loads and checks the results file(s)

Usage

```
load_results_EnVision(results_file, headers = gDRutils::get_env_identifiers())
```

Arguments

results_file character vector containing file path(s) to results file(s)
 headers list of headers identified in the manifest

Value

data.table with results data

load_results_EnVision_new

Load results from EnVision_new (CSV and XLSX)

Description

This functions loads and checks the results file(s) from a new Envision instrument in the CSV or XLSX format. Supports multiple plates in a single file or multiple sheets in an Excel file by robustly checking the file structure.

Usage

```
load_results_EnVision_new(
  results_file,
  headers = gDRutils::get_env_identifiers()
)
```

Arguments

results_file character, file path(s) to result file(s)
 headers list of headers identified in the manifest

Value

data.table with results data

load_results_Incucyte *Load incucyte results from plain text*

Description

This functions loads incucyte time-course cell count file

Usage

```
load_results_Incucyte(results_file, headers = gDRutils::get_env_identifiers())
```

Arguments

results_file list of strings: file paths to result paths from individual plates
 headers list of headers identified in the manifest

Value

data.table derived from Incucyte data

load_results_Tecan *Load tecan results from xlsx*

Description

This functions loads and checks the results file

Usage

```
load_results_Tecan(results_file, headers = gDRutils::get_env_identifiers())
```

Arguments

results_file string, file path to a result file
 headers list of headers identified in the manifest

Value

data.table derived from Tecan data

load_results_tsv *Load results from tsv*

Description

This functions loads and checks the results file(s)

Usage

```
load_results_tsv(results_file, headers)
```

Arguments

results_file character, file path(s) to template(s)
 headers list of headers identified in the manifest

Value

data.table with results data

load_templates	<i>Load templates</i>
----------------	-----------------------

Description

This functions loads and checks the template file(s)

Usage

```
load_templates(df_template_files)
```

Arguments

df_template_files
data.table, with datapaths and names of results file(s) or character with file path of templates file(s)

Value

data.table with templates data

Examples

```
td <- get_test_data()
t_df <- load_templates(template_path(td))
```

load_templates_tsv	<i>Load templates from tsv</i>
--------------------	--------------------------------

Description

This functions loads and checks the template file(s)

Usage

```
load_templates_tsv(template_file, template_filename = NULL)
```

Arguments

template_file character, file path(s) to template(s)
template_filename
character, file name(s)

Value

data.table with template data

load_templates_xlsx	<i>Load templates from xlsx</i>
---------------------	---------------------------------

Description

This functions loads and checks the template file(s)

Usage

```
load_templates_xlsx(template_file, template_filename = NULL)
```

Arguments

template_file	character, file path(s) to template(s)
template_filename	character, file name(s)

Value

data.table with templates data

manifest_path	<i>Method manifest_path</i>
---------------	-----------------------------

Description

Method for object gdr_test_data - access to slot manifest_path

Usage

```
manifest_path(x)

## S4 method for signature 'gdr_test_data'
manifest_path(x)
```

Arguments

x	object class gdr_test_data
---	----------------------------

Value

value of slot manifest_path

Examples

```
td <- get_test_data()
manifest_file_path <- manifest_path(td)
```

mgrepl	<i>grep wrapper to support multiple patterns</i>
--------	--

Description

grep wrapper to support multiple patterns

Usage

```
mgrepl(patterns, x, do_unlist = TRUE, ...)
```

Arguments

patterns	charvec with patterns to be checked
x	charvec with data
do_unlist	logical_flag unlist the final results?
...	additional argument

Value

list of charvec with grep output

parse_D300_xml	<i>Parse D300</i>
----------------	-------------------

Description

This function parses a D300 *.tdd file (XML format) into a data.table

Usage

```
parse_D300_xml(D300_file)
```

Arguments

D300_file	string, file path to D300 .tdd file
-----------	-------------------------------------

Value

data.table representing input D300_file.

Examples

```
td3 <- get_test_D300_data()
fs <- td3[["f_96w"]]
dose_df <- parse_D300_xml(fs[["d300"]])
```

read_EnVision_delim *Read EnVision delimited text files*

Description

This function reads file from the EnVision Workstation

Usage

```
read_EnVision_delim(file, nrows = 10000, seps = c(",", "\t"))
```

Arguments

file	string to path of input file from EnVision scanner
nrows	maximum number of file rows to be processed
seps	potential field separators of the input file

Value

a list containing the data table, n_col, n_row, and if is edited

read_EnVision_xlsx *Read in single xlsx data from EnVision*

Description

Read in single xlsx data from EnVision

Usage

```
read_EnVision_xlsx(results_file, results_sheet)
```

Arguments

results_file	character, file path(s) to results file(s)
results_sheet	results sheet names

Value

data.table with results data

read_excel_to_dt *Read excel file and transform it into data.table object*

Description

Read excel file and transform it into data.table object

Usage

```
read_excel_to_dt(path, ...)
```

Arguments

path	path to excel file
...	other arguments that should be passed into readxl::read_excel

Value

data.table object with read excel file

Examples

```
datasets <- readxl::readxl_example("datasets.xlsx")
read_excel_to_dt(datasets)
```

read_in_EnVision_file *Read EnVision file*

Description

This function reads file from the EnVision Workstation

Usage

```
read_in_EnVision_file(file, nrows, seps)
```

Arguments

file	input file from EnVision
nrows	maximum number of file rows to be processed
seps	potential field separators of the input file

Value

list with one element per EnVisoin input file

read_in_manifest_file *read manifest files*

Description

read manifest files

Usage

```
read_in_manifest_file(manifest_file, available_formats)
```

Arguments

manifest_file character, file path(s) to manifest(s)

available_formats

charvec with available file formats

Value

a data.table with manifest data

read_in_result_files *Read in results files*

Description

Read in results files

Usage

```
read_in_result_files(results_file, results_filename, headers)
```

Arguments

results_file data.table, with datapaths and names of results file(s) or character with file path of results file(s)

results_filename

charvect with file names

headers list of headers identified in the result files

Value

data.table with results data

read_in_results_Tecan *read in Tecan data*

Description

read in Tecan data

Usage

```
read_in_results_Tecan(results_file, results_sheets, headers)
```

Arguments

results_file string, file path to a result file
results_sheets template sheet names
headers list of headers identified in the manifest

Value

data.table derived from Tecan data

read_in_template_sheet_xlsx
Read in data from xlsx template sheet

Description

Read in data from xlsx template sheet

Usage

```
read_in_template_sheet_xlsx(template_file, template_sheets, idx, plate_info)
```

Arguments

template_file character, file path(s) to template(s)
template_sheets template sheet names
idx template file index
plate_info list with plate info

Value

data.table with template data

read_in_template_xlsx *Read in xlsx template files*

Description

Read in xlsx template files

Usage

```
read_in_template_xlsx(template_file, template_filename, template_sheets)
```

Arguments

template_file character, file path(s) to template(s)
template_filename character, file name(s)
template_sheets template sheet names

Value

data.table with templates data

read_in_tsv_template_files
read in tsv template files

Description

read in tsv template files

Usage

```
read_in_tsv_template_files(template_file, template_filename, templates)
```

Arguments

template_file character, file path(s) to template(s)
template_filename character, file name(s)
templates list with templates data

Value

data.table with templates data

read_ref_data	<i>read_ref_data</i>
---------------	----------------------

Description

Read reference data

Usage

```
read_ref_data(inDir, prefix = "ref")
```

Arguments

inDir	a directory path of reference data
prefix	a prefix of reference file names ('ref' by default)

Value

a list of reference data

result_path	<i>Method result_path</i>
-------------	---------------------------

Description

Method for object gdr_test_data - access to slot result_path

Usage

```
result_path(x)

## S4 method for signature 'gdr_test_data'
result_path(x)
```

Arguments

x	object class gdr_test_data
---	----------------------------

Value

value of slot result_path

Examples

```
td <- get_test_data()
result_file_path <- result_path(td)
```

save_drug_info_per_well

for each drug create a Gnumber and Concentration information for each well

Description

for each drug create a Gnumber and Concentration information for each well

Usage

```
save_drug_info_per_well(trt_info, trt_gnumber_conc, wb, idfs)
```

Arguments

trt_info	list with treatment info
trt_gnumber_conc	list with treatment data
wb	pointer to xlsx workbook
idfs	charvec with identifiers

Value

NULL invisibly.

setEnvForPSet

Adjust environment variables to meet gDR standards

Description

Adjust environment variables to meet gDR standards

Usage

```
setEnvForPSet()
```

Value

NULL

Examples

```
setEnvForPSet()  
gDRutils::reset_env_identifiers()
```

standardize_record_values
standardize_record_values

Description

map values to a dictionary

Usage

```
standardize_record_values(x, dictionary = DICTIONARY)
```

Arguments

x a named array
dictionary a named array

Value

a named array with updated names

Examples

```
standardize_record_values(c("Vehicle", "vehcle"))
```

template_path *Method template_path*

Description

Method for object gdr_test_data - access to slot template_path

Usage

```
template_path(x)  
  
## S4 method for signature 'gdr_test_data'  
template_path(x)
```

Arguments

x object class gdr_test_data

Value

value of slot template_path

Examples

```
td <- get_test_data()
template_file_path <- template_path(td)
```

```
validate_template_xlsx
```

Validate template xlsx data

Description

Validate template xlsx data

Usage

```
validate_template_xlsx(template_file, template_filename, template_sheets, idx)
```

Arguments

template_file	character, file path(s) to template(s)
template_filename	character, file name(s)
template_sheets	template sheet names
idx	template file index

Value

NULL invisibly.

Index

- * **D300**
 - import_D300, 21
 - parse_D300_xml, 29
 - save_drug_info_per_well, 36
- * **classes**
 - gdr_test_data-class, 12
- * **correction_exception**
 - .check_against_single_template_sheet, 3
 - are_template_sheets_valid, 4
 - check_metadata_against_spaces, 4
 - check_metadata_field_names, 5
 - check_metadata_headers, 5
 - check_metadata_names, 6
 - check_metadata_req_col_names, 6
 - correct_template_sheets, 10
 - fix_typos_with_reference, 12
 - get_exception_data, 15
 - get_expected_template_sheets, 16
 - get_xl_sheets, 19
 - mgrepl, 29
- * **load_files**
 - enhance_raw_edited_EnVision_df, 11
 - get_df_from_raw_edited_EnVision_df, 13
 - get_df_from_raw_unedited_EnVision_df, 14
 - get_EnVision_properties, 14
 - get_excel_sheet_names, 15
 - get_plate_info_from_template_xlsx, 16
 - load_data, 22
 - load_manifest, 23
 - load_results, 24
 - load_results_EnVision, 24
 - load_results_EnVision_new, 25
 - load_results_Incucyte, 25
 - load_results_Tecan, 26
 - load_results_tsv, 26
 - load_templates, 27
 - load_templates_tsv, 27
 - load_templates_xlsx, 28
 - read_EnVision_delim, 30
 - read_EnVision_xlsx, 30
 - read_in_EnVision_file, 31
 - read_in_manifest_file, 32
 - read_in_result_files, 32
 - read_in_results_Tecan, 33
 - read_in_template_sheet_xlsx, 33
 - read_in_template_xlsx, 34
 - read_in_tsv_template_files, 34
 - validate_template_xlsx, 38
- * **methods**
 - manifest_path, 28
 - result_path, 35
 - template_path, 37
- * **prism_conversion**
 - convert_LEVEL5_prism_to_gDR_input, 7
 - convert_LEVEL6_prism_to_gDR_input, 8
- * **pset_conversion**
 - convert_MAE_to_PSet, 9
 - convert_pset_to_df, 9
 - getPSet, 20
 - setEnvForPSet, 36
- * **test_data_class**
 - gdr_test_data-class, 12
 - get_test_data, 17
 - manifest_path, 28
 - result_path, 35
 - template_path, 37
- * **test_data**
 - get_test_D300_data, 17
 - get_test_EnVision_data, 18
 - get_test_Tecan_data, 18
 - get_test_tsv_data, 19
- * **utils**

detect_file_format, 11
is_readable_v, 22
read_excel_to_dt, 31
read_ref_data, 35
standardize_record_values, 37
.check_against_single_template_sheet,
3
are_template_sheets_valid, 4
check_metadata_against_spaces, 4
check_metadata_field_names, 5
check_metadata_headers, 5
check_metadata_names, 6
check_metadata_req_col_names, 6
convert_LEVEL5_prism_to_gDR_input, 7
convert_LEVEL6_prism_to_gDR_input, 8
convert_MAE_to_PSet, 9
convert_pset_to_df, 9
correct_template_sheets, 10
detect_file_format, 11
enhance_raw_edited_EnVision_df, 11
fix_typos_with_reference, 12
gdr_test_data-class, 12
get_df_from_raw_edited_EnVision_df, 13
get_df_from_raw_unedited_EnVision_df,
14
get_EnVision_properties, 14
get_excel_sheet_names, 15
get_exception_data, 15
get_expected_template_sheets, 16
get_plate_info_from_template_xlsx, 16
get_test_D300_data, 17
get_test_data, 17
get_test_data(), 12
get_test_EnVision_data, 18
get_test_Tecan_data, 18
get_test_tsv_data, 19
get_xl_sheets, 19
getPSet, 20
import_D300, 21
is_readable_v, 22
load_data, 22
load_manifest, 23
load_results, 24
load_results_EnVision, 24
load_results_EnVision_new, 25
load_results_Incucyte, 25
load_results_Tecan, 26
load_results_tsv, 26
load_templates, 27
load_templates_tsv, 27
load_templates_xlsx, 28
manifest_path, 28
manifest_path, gdr_test_data-method
(manifest_path), 28
mgrepl, 29
parse_D300_xml, 29
read_EnVision_delim, 30
read_EnVision_xlsx, 30
read_excel_to_dt, 31
read_in_EnVision_file, 31
read_in_manifest_file, 32
read_in_result_files, 32
read_in_results_Tecan, 33
read_in_template_sheet_xlsx, 33
read_in_template_xlsx, 34
read_in_tsv_template_files, 34
read_ref_data, 35
result_path, 35
result_path, gdr_test_data-method
(result_path), 35
save_drug_info_per_well, 36
setEnvForPSet, 36
standardize_record_values, 37
template_path, 37
template_path, gdr_test_data-method
(template_path), 37
validate_template_xlsx, 38