

# Package ‘ROI.models.globalOptTests’

January 20, 2025

**Type** Package

**Title** 'ROI' Optimization Problems Based on 'globalOptTests'

**Version** 1.1-2

**Description** A collection of non-linear optimization problems with box bounds transformed into 'ROI' optimization problems.  
This package provides a wrapper around the 'globalOptTests' which provides a collection of global optimization problems.  
More information can be found in the 'README' file.

**Imports** ROI ( $\geq$  0.3-0), globalOptTests

**Suggests** Rglpk ( $\geq$  0.6-2)

**License** GPL-3

**RoxygenNote** 7.2.3

**NeedsCompilation** no

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**Repository** CRAN

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globopt	<i>Access globalOptTests</i>
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## Description

Get one or more optimization problems, meta information or a listing of the available globalOptTests problems.

## Usage

```
globopt(x = c("all", "metainfo", "Ackleys", "AluffiPentini",  
             "BeckerLago", "Bohachevsky1", "Bohachevsky2",  
             "Branin", "Camel3", "Camel6", "CosMix2", "CosMix4",  
             "DekkersAarts", "Easom", "EMichalewicz", "Expo",  
             "GoldPrice", "Griewank", "Gulf",  
             "Hosaki", "Kowalik", "LM1", "LM2n10",  
             "LM2n5", "McCormic", "MeyerRoth", "MieleCantrell",  
             "Modlangerman", "ModRosenbrock", "MultiGauss",  
             "Neumaier2", "Neumaier3", "Paviani", "Periodic",  
             "PowellQ", "PriceTransistor", "Rastrigin",  
             "Rosenbrock", "Salomon", "Schaffer1", "Schaffer2",  
             "Schubert", "Schwefel", "Shekel10", "Shekel5",  
             "Shekel7", "Shekelfox5", "Wood", "Zeldasine10",  
             "Zeldasine20"))
```

## Arguments

x	a character giving the names of the optimization problems to be returned, if x is "all" all available problems are returned, if x is the name of a single problem the given problem is returned. If x is missing a listing of all available problems is returned. If x is "metainfo" the meta information about the problems is returned.
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## Examples

```
## list all available MIPLIB-2010 problems  
globopt()  
## get all miplib problems  
globopt("all")  
## get a single problem  
globopt("MieleCantrell")  
## get the meta information  
globopt("metainfo")
```

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