

# Package ‘ADGofTest’

January 20, 2025

**Type** Package

**Title** Anderson-Darling GoF test

**Version** 0.3

**Date** 2011-12-28

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**Description** Anderson-Darling GoF test with p-value calculation based on Marsaglia's 2004 paper ``Evaluating the Anderson-Darling Distribution''

**License** GPL

**LazyLoad** yes

**Repository** CRAN

**Date/Publication** 2011-12-28 13:50:19

**NeedsCompilation** no

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ADGofTest-package      *Implementation of the Anderson-Darling goodness of fit test.*

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## Description

Implementation of the Anderson-Darling goodness of fit test.

## Details

Package:	ADGofTest
Type:	Package
Version:	0.1
Date:	2009-06-26
License:	GPL
LazyLoad:	yes

## Author(s)

Carlos J. Gil Bellosta

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## References

G. and J. Marsaglia, "Evaluating the Anderson-Darling Distribution", Journal of Statistical Software, 2004

*ad.test*

*Anderson-Darling GoF test*

## Description

Implementation of the Anderson-Darling goodness of fit test.

## Usage

```
ad.test(x, distr.fun, ...)
```

## Arguments

- x a random sample from a possibly unknown continuous distribution
- distr.fun a named CDF, such as `pnorm`, `punif`, etc.
- ... extra parameters for the distribution function above, such as location and scale parameters, etc.

## Details

If the `distr.fun` is provided, the function checks whether `x` is a iid sample from the distribution described by such CDF. Otherwise, whether they follow a uniform law.

**Value**

The output is an object of the class `htest` exactly like for the Kolmogorov-Smirnov test, `ks.test`. The `statistic` and `p.value` fields are the most relevant ones.

**Author(s)**

Carlos J. Gil Bellosta

**References**

G. and J. Marsaglia, "Evaluating the Anderson-Darling Distribution", Journal of Statistical Software, 2004

**Examples**

```
set.seed( 123 )
x <- runif( 100 )

ad.test( x )$p.value

ad.test( x, pnorm, 0, 1 )$p.value

replicate( ad.test( rnorm( 100 ), pnorm )$p.value, 100 )
```

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