# **Resource Summary Report**

Generated by dkNET on Apr 30, 2025

## **CAST**

RRID:SCR 000628

Type: Tool

## **Proper Citation**

CAST (RRID:SCR\_000628)

#### **Resource Information**

URL: http://athina.biol.uoa.gr/CAST/

**Proper Citation:** CAST (RRID:SCR\_000628)

**Description:** A novel algorithm for low-complexity region detection and selective masking. The algorithm is based on multiple-pass Smith-Waterman comparison of the query sequence against twenty homopolymers with infinite gap penalties. The output of the algorithm is both the masked query sequence for further analysis, e.g. database searches, as well as the regions of low complexity.

**Abbreviations: CAST** 

**Synonyms:** CAST - Compositional Bias Detection Algorithm

Resource Type: data analysis software, sequence analysis software, software resource,

data processing software, software application

**Defining Citation:** PMID:11120681

**Keywords:** low-complexity region detection and selective masking, query sequence against twenty homopolymers, infinite gap penalties, masked query sequence,

Funding: European Molecular Biology Laboratory; Heidelberg; Germany;

European Union; TMR Proramme; IBM Research

**Availability:** Executable binaries are available to academic users free of charge under license.

Resource Name: CAST

Resource ID: SCR\_000628

Alternate IDs: nlx\_151779

Old URLs: http://www.ebi.ac.uk/research/cgg/services/cast/

**Record Creation Time:** 20220129T080202+0000

**Record Last Update:** 20250430T055029+0000

## Ratings and Alerts

No rating or validation information has been found for CAST.

No alerts have been found for CAST.

#### Data and Source Information

Source: SciCrunch Registry

## **Usage and Citation Metrics**

We found 10 mentions in open access literature.

**Listed below are recent publications.** The full list is available at dkNET.

Clayton EL, et al. (2017) Early microgliosis precedes neuronal loss and behavioural impairment in mice with a frontotemporal dementia-causing CHMP2B mutation. Human molecular genetics, 26(5), 873.

Martín-Ibáñez R, et al. (2017) Helios expression coordinates the development of a subset of striatopallidal medium spiny neurons. Development (Cambridge, England), 144(8), 1566.

De Blasio MJ, et al. (2016) Leptin Matures Aspects of Lung Structure and Function in the Ovine Fetus. Endocrinology, 157(1), 395.

Woods DL, et al. (2015) Aided and unaided speech perception by older hearing impaired listeners. PloS one, 10(3), e0114922.

Sanz L, et al. (2015) Swept-sine noise-induced damage as a hearing loss model for preclinical assays. Frontiers in aging neuroscience, 7, 7.

Hansen CF, et al. (2013) Hypertrophy dependent doubling of L-cells in Roux-en-Y gastric bypass operated rats. PloS one, 8(6), e65696.

Denk D, et al. (2012) PAX5-AUTS2: a recurrent fusion gene in childhood B-cell precursor acute lymphoblastic leukemia. Leukemia research, 36(8), e178.

Hosseini-Sharifabad M, et al. (2012) The effect of prenatal exposure to restraint stress on hippocampal granule neurons of adult rat offspring. Iranian journal of basic medical sciences, 15(5), 1060.

Knudsen L, et al. (2011) Ultrastructural changes of the intracellular surfactant pool in a rat model of lung transplantation-related events. Respiratory research, 12(1), 79.

Knudsen L, et al. (2007) Truncated recombinant human SP-D attenuates emphysema and type II cell changes in SP-D deficient mice. Respiratory research, 8(1), 70.