# Resource Summary Report

Generated by NIF on May 12, 2025

## MADS+ - discovery of differential splicing events from Affymetrix exon junction array data

RRID:SCR_007189
Type: Tool

### Proper Citation

MADS+ - discovery of differential splicing events from Affymetrix exon junction array data (RRID:SCR_007189)

### Resource Information

**URL:** http://www.mimg.ucla.edu/faculty/xing/MADSplus/instructions.html

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**Description:** The Affymetrix Human Exon Junction Array is a newly designed high-density exon-sensitive microarray for global analysis of alternative splicing. Contrary to the Affymetrix exon 1.0 array, which only contains 4 probes per exon and no probes for exon-exon junctions, this new junction array averages 8 probes per probeset targeting all exons and exon-exon junctions observed in the human mRNA/EST transcripts, representing a significant increase in the probe density for alternative splicing events. Here, we present MADS+, a computational pipeline to detect differential splicing events from the Affymetrix exon junction array data. For each alternative splicing event, MADS+ evaluates the signals of probes targeting competing transcript isoforms to identify exons or splice sites with different levels of transcript inclusion between two sample groups. MADS+ is used routinely in our analysis of Affymetrix exon junction arrays and has a high accuracy in detecting differential splicing events. For example, in a study of a novel epithelial-specific splicing regulator ESRP1, MADS+ detects hundreds of exons whose inclusion levels are dependent on ESRP1, with a RT-PCR validation rate of 88.5% (153 exons validated out of 173 tested).

**Abbreviations:** MADS+

**Resource Type:** service resource, source code, software resource

**Keywords:** algorithm

**Funding:**

**Resource Name:** MADS+ - discovery of differential splicing events from Affymetrix exon junction array data

**Resource ID:** SCR_007189

**Alternate IDs:** nlx_93953

**Alternate URLs:** https://omictools.com/mads-tool

**Old URLs:** http://www.medicine.uiowa.edu/Labs/Xing/MADSplus/

**Record Creation Time:** 20220129T080240+0000

**Record Last Update:** 20250509T055835+0000

## Ratings and Alerts

No rating or validation information has been found for MADS+ - discovery of differential splicing events from Affymetrix exon junction array data.

No alerts have been found for MADS+ - discovery of differential splicing events from Affymetrix exon junction array data.

## Data and Source Information

**Source:** SciCrunch Registry

## Usage and Citation Metrics

We have not found any literature mentions for this resource.