Resource Summary Report

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MSY Breakpoint Mapper

RRID:SCR_007810
Type: Tool

Proper Citation

MSY Breakpoint Mapper (RRID:SCR_007810)

Resource Information

URL: http://breakpointmapper.wi.mit.edu

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Description: A database of sequence-tagged sites (STSs) and a user interface for mapping partial deletions in the male-specific region of the human Y chromosome (MSY). Naturally occurring partial deletions in the human Y chromosome are associated with diverse phenotypes including male infertility, sex reversal, Turner syndrome, and germ cell tumor formation. With the complete sequence of the euchromatic Y chromosome in hand, it is now possible to precisely demarcate each deletion and the repertoire of genes lost, and to propose mechanisms of deletion. Detailed DNA-sequence analysis of MSY deletions is most readily accomplished with Y-specific STS assays, which employ the polymerase chain reaction (PCR). Each such STS assay provides a straightforward means of determining the presence or absence, in a sample of human genomic DNA, of a specific point along the length of the Y chromosome. In the course of analyzing normal and aberrant Y chromosomes over the past two decades, we and our colleagues have generated robust, Y-specific STSs at an average spacing of less than 14 kilobases across the MSY euchromatin. MSY Breakpoint Mapper provides information about these STSs and is useful for efficiently and systematically defining the breakpoint(s) of virtually any Y chromosome deletion.

Synonyms: MSY Breakpoint Mapper

Resource Type: database, data or information resource

Funding:

Resource Name: MSY Breakpoint Mapper

Resource ID: SCR_007810

Alternate IDs: nif-0000-03168

Record Creation Time: 20220129T080243+0000

Record Last Update: 20250423T060416+0000

Ratings and Alerts

No rating or validation information has been found for MSY Breakpoint Mapper.

No alerts have been found for MSY Breakpoint Mapper.

Data and Source Information

Source: SciCrunch Registry

Usage and Citation Metrics

We found 3 mentions in open access literature.

Listed below are recent publications. The full list is available at FDI Lab - SciCrunch.org.

Krausz C, et al. (2014) EAA/EMQN best practice guidelines for molecular diagnosis of Y-chromosomal microdeletions: state-of-the-art 2013. Andrology, 2(1), 5.

Lange J, et al. (2013) Intrachromosomal homologous recombination between inverted amplicons on opposing Y-chromosome arms. Genomics, 102(4), 257.

Lange J, et al. (2009) Isodicentric Y chromosomes and sex disorders as byproducts of homologous recombination that maintains palindromes. Cell, 138(5), 855.