Resource Summary Report

Generated by NIF on Apr 17, 2025

Kismeth

RRID:SCR_005444
Type: Tool

Proper Citation

Kismeth (RRID:SCR_005444)

Resource Information

URL: http://katahdin.mssm.edu/kismeth/revpage.pl

Proper Citation: Kismeth (RRID:SCR_005444)

Description: A web-based tool for bisulfite sequencing analysis that was designed to be used with plants, since it considers potential cytosine methylation in any sequence context (CG, CHG, and CHH). It provides a tool for the design of bisulfite primers as well as several tools for the analysis of the bisulfite sequencing results. Kismeth is not limited to data from plants, as it can be used with data from any species.

Abbreviations: Kismeth

Resource Type: data analysis service, production service resource, service resource, analysis service resource

Defining Citation: PMID:18786255

Keywords: plant, methylation, bisulfite sequencing, bio.tools

Funding:

Availability: Free for academic use, Contact for commercial use

Resource Name: Kismeth

Resource ID: SCR_005444

Alternate IDs: biotools:kismeth, OMICS_00602

Alternate URLs: https://bio.tools/kismeth

Record Creation Time: 20220129T080230+0000

Record Last Update: 20250417T065222+0000

Ratings and Alerts

No rating or validation information has been found for Kismeth.

No alerts have been found for Kismeth.

Data and Source Information

Source: SciCrunch Registry

Usage and Citation Metrics

We found 53 mentions in open access literature.

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

Li H, et al. (2023) Methionine biosynthesis enzyme MoMet2 is required for rice blast fungus pathogenicity by promoting virulence gene expression via reducing 5mC modification. PLoS genetics, 19(9), e1010927.

Liu ZW, et al. (2023) Depositing centromere repeats induces heritable intragenic heterochromatin establishment and spreading in Arabidopsis. Nucleic acids research, 51(12), 6039.

Majka M, et al. (2023) The chromatin determinants and Ph1 gene effect at wheat sites with contrasting recombination frequency. Journal of advanced research, 53, 75.

Xu JH, et al. (2022) Loss of Function of the RRMF Domain in OsROS1a Causes Sterility in Rice (Oryza sativa L.). International journal of molecular sciences, 23(19).

Gui X, et al. (2022) Geminiviruses employ host DNA glycosylases to subvert DNA methylation-mediated defense. Nature communications, 13(1), 575.

Wang Z, et al. (2021) ARGONAUTE 2 increases rice susceptibility to rice black-streaked dwarf virus infection by epigenetically regulating HEXOKINASE 1 expression. Molecular plant pathology, 22(9), 1029.

Campo S, et al. (2021) A novel Transposable element-derived microRNA participates in plant immunity to rice blast disease. Plant biotechnology journal, 19(9), 1798.

Sigman MJ, et al. (2021) An siRNA-guided ARGONAUTE protein directs RNA polymerase V to initiate DNA methylation. Nature plants, 7(11), 1461.

Wu Y, et al. (2021) Functional Analysis of the "Green Revolution" Gene Photoperiod-1 and Its Selection Trends During Bread Wheat Breeding. Frontiers in plant science, 12, 745411.

Bai M, et al. (2021) KSN heterozygosity is associated with continuous flowering of Rosa rugosa Purple branch. Horticulture research, 8(1), 26.

Guo W, et al. (2021) RNA-directed DNA methylation prevents rapid and heritable reversal of transposon silencing under heat stress in Zea mays. PLoS genetics, 17(6), e1009326.

Jiang J, et al. (2021) UVR8 interacts with de novo DNA methyltransferase and suppresses DNA methylation in Arabidopsis. Nature plants, 7(2), 184.

Han T, et al. (2021) An epigenetic basis of inbreeding depression in maize. Science advances, 7(35).

Watanabe K, et al. (2021) Mastrevirus Rep and RepA Proteins Suppress de novo Transcriptional Gene Silencing. International journal of molecular sciences, 22(21).

Kuriyama K, et al. (2020) Disturbance of floral colour pattern by activation of an endogenous pararetrovirus, petunia vein clearing virus, in aged petunia plants. The Plant journal : for cell and molecular biology, 103(2), 497.

Rodríguez-Gandarilla MG, et al. (2020) Superinfection by PHYVV Alters the Recovery Process in PepGMV-Infected Pepper Plants. Viruses, 12(3).

Wang L, et al. (2020) A virus-encoded protein suppresses methylation of the viral genome through its interaction with AGO4 in the Cajal body. eLife, 9.

Xu L, et al. (2020) Regulation of Rice Tillering by RNA-Directed DNA Methylation at Miniature Inverted-Repeat Transposable Elements. Molecular plant, 13(6), 851.

Liu J, et al. (2020) A copia-like retrotransposon insertion in the upstream region of the SHATTERPROOF1 gene, BnSHP1.A9, is associated with quantitative variation in pod shattering resistance in oilseed rape. Journal of experimental botany, 71(18), 5402.

Rathore P, et al. (2020) Retro-Element Gypsy-163 Is Differentially Methylated in Reproductive Tissues of Apomictic and Sexual Plants of Cenchrus ciliaris. Frontiers in genetics, 11, 795.