



25195-CrossCheck

Quotes Excluded
Bibliography Excluded13%
SIMILAR**2**
Name of Journal: *World Journal of Biological Chemistry*

ESPS Manuscript NO: 25195

Manuscript Type: MINIREVIEWS

Chromatin boundary elements organize genomic architecture and developmental gene regulation in *Drosophila* Hox clusters

Zhibo Ma, Mo Li, Sharmila Roy, Kevin J Liu, Matthew L Romine, Derrick C Lane, Sapna K Patel and Haini N Cai

Abstract

7 The three-dimensional (3D) organization of the eukaryotic genome is critical for its proper function. Evidence suggests that extensive chromatin loops form the building blocks of the genomic architecture, separating genes and gene clusters into distinct functional domains. These loops are anchored in part by a special type of DNA elements called Chromatin Boundary Elements (CBEs). CBEs were originally found to insulate neighboring genes by blocking influences of transcriptional enhancers or the spread of silent chromatin. However, recent results show that chromatin loops can also play a positive role in gene regulation by looping out intervening DNA and "delivering" remote enhancers to gene promoters. In addition, studies from human and model organisms indicate that the configuration of chromatin loops, many of which are tethered by CBEs, is dynamically regulated during cell differentiation. In particular, a recent work by Li *et. al.* has shown that the SF1 boundary, located in the *Drosophila* Hox cluster, regulates local

Match Overview

1	CrossCheck 119 words Li, Mo, Zhibo Ma, Jiayang K. Liu, Sharmila Roy, Sapna K. Patel, Derrick C. Lane, and Haini N. Cai. "An Organizationa	5%
2	Internet 25 words crawled on 26-May-2015 www.wjgnet.com	1%
3	CrossCheck 17 words "HUMAN GENETICS: Does duplicity make you anxious?", Nature Reviews Genetics, 10/2001	1%
4	Internet 16 words crawled on 29-May-2009 nar.oxfordjournals.org	1%
5	CrossCheck 13 words Anna Tattermusch. "A scaffold for X chromosome inactivation", Human Genetics, 06/10/2011	1%
6	CrossCheck 10 words Emmanuele Mouchel-Vielh. "Expression of a homologue ... the fushi tarazu (ftz) gene in a cirripede crustacean", Evolu	<1%

全部 图片 新闻 视频 地图 更多 搜索工具

找到约 1,260,000 条结果 (用时 0.34 秒)

Google 学术: Genomic Architecture and Developmental Gene Regulation

... connect gene expression and chromatin architecture - Kagey - 被引用次数: 811

... copy number polymorphism in the human genome - Sebat - 被引用次数: 2238

... nuclear architecture, genome organization, and gene ... - Schneider - 被引用次数: 298

A mechanistic link between gene regulation and genome ...

www.ncbi.nlm.nih.gov/pubmed/24998386 ▾ 翻译此页

作者: G Bonora - 2014 - 被引用次数: 12 - 相关文章

2014年7月5日 - A mechanistic link between gene regulation and genome architecture in mammalian development. Bonora G(1), Plath K(2), Denholtz M(3).

Developmental gene regulation in the era of genomics

www.sciencedirect.com/science/article/.../S001216060901464X ▾ 翻译此页

作者: J Zeitlinger - 2010 - 被引用次数: 22 - 相关文章

Understanding the global regulation of developmental control genes may provide such as those involved in chromatin regulation and cellular architecture, are

Spitz Group (Visiting) - Gene regulation and genome ...

www.embl.de/research/units/dev_biology/spitz/ ▾ 翻译此页

Gene regulation and genome architecture. ... Abnormal skull development in mice with a deletion of distal enhancers engineered by in vivo recombination.

Dynamic genome architecture in the nuclear space - Nature

www.nature.com > Journal home > Archive > Review - 翻译此页

作者: C Lanctôt - 2007 - 被引用次数: 563 - 相关文章

Dynamic genome architecture in the nuclear space: regulation of gene clue has come from the observation that blocking the development of D. melanogaster

[PDF] Long-range transcriptional regulation of vertebrate ...

www.somosbacteriasvirus.com/architecture.pdf ▾ 翻译此页

作者: P Navrátilová - 相关文章

Long-range transcriptional regulation of vertebrate developmental genes and the evolution of genome architecture by Pavla Navrátilová. Dissertation for the

[全部](#)[图片](#)[新闻](#)[视频](#)[购物](#)[更多 ▾](#)[搜索工具](#)

找到约 23,400 条结果 (用时 0.71 秒)

Google 学术: Chromatin boundary elements organize genomic architecture and developmental gene regulation in Drosophila Hox clusters

... of active and silent chromatin domains in human HOX ... - Rinn - 被引用次数: 2060

... nuclear architecture, genome organization, and gene ... - Schneider - 被引用次数: 301

... genomes identified by analysis of chromatin ... - Dixon - 被引用次数: 999

Chromatin-Driven Behavior of Topologically Associating ...

www.sciencedirect.com/science/article/.../S0022283614005129 ▾ [翻译此页](#)

作者: F Ciabrelli - 2015 - 被引用次数: 19 - [相关文章](#)

Metazoan genomes are highly organized inside the cell nucleus. ... of a given TAD can guide its nuclear positioning and therefore shape the genome architecture. ... Those domains cluster groups of active genes, which regulation relies on distal ... which includes the presence of distal regulatory elements called enhancers.

Genes | Free Full-Text | Chromatin Insulators and ...

www.mdpi.com/2073-4425/6/3/790/htm ▾ [翻译此页](#)

作者: NK Matharu - 2015 - [相关文章](#)

2015年9月1日 - insulators; architectural proteins; TAD boundaries; chromatin ...



全部 图片 视频 新闻 更多 ▾ 搜索工具

找到约 23,100 条结果 (用时 0.61 秒)

Google 学术: Chromatin boundary elements organize genomic architecture and developmental gene regulation in Drosophila Hox clusters

... of active and silent chromatin domains in human HOX ... - Rinn - 被引用次数: 2161

... nuclear architecture, genome organization, and gene ... - Schneider - 被引用次数: 317

... interchromosomal colocalization between Igf2/H19 and ... - Ling - 被引用次数: 445

Temporal dynamics and developmental memory of 3D chromatin ...

www.ncbi.nlm.nih.gov > NCBI > Literature > PubMed Central (PMC) ▾ 翻译此页

作者: D Noordermeer - 2014 - 被引用次数: 32 - 相关文章

2014年4月29日 - Initially, Hox clusters are organized as single chromatin ... Mouse and human Hox genes are organized in four genomic clusters (HoxA to HoxD), where the ... body level primarily relies upon local regulatory elements (Tschopp et al., ... the ground state 3D architecture of the Hox clusters, which we assessed ...

Vertebrate GAGA factor associated insulator elements demarcate ...

www.ncbi.nlm.nih.gov > NCBI > Literature > PubMed Central (PMC) ▾ 翻译此页

作者: S Srivastava - 2013 - 被引用次数: 13 - 相关文章

2013年4月22日 - Mouse transgenes bearing regulatory regions of Hox genes faithfully ... Chromatin boundaries or insulator elements are implicated in regulating ... To identify all genomic regions associated with poor histone H3 presence in the ... Hox genes are organized in a cluster, yet they are uniquely regulated in a ...

Dynamics and interplay of nuclear architecture, genome organization ...

genesdev.cshlp.org/content/21/23/3027.full ▾ 翻译此页

作者: R Schneider - 2007 - 被引用次数: 317 - 相关文章

The organization of the genome in the nucleus of a eukaryotic cell is fairly complex and dynamic. ... the