

Accepted Manuscript

HCSGD: an integrated database of human cellular senescence genes

Qiongye Dong, Hongqing Han, Xuehui Liu, Lei Wei, Wei Zhang, Zhen Zhao, Michael Q. Zhang, Xiaowo Wang



PII: S1673-8527(17)30070-X

DOI: [10.1016/j.jgg.2017.04.001](https://doi.org/10.1016/j.jgg.2017.04.001)

Reference: JGG 524

To appear in: *Journal of Genetics and Genomics*

Received Date: 12 December 2016

Revised Date: 4 April 2017

Accepted Date: 10 April 2017

Please cite this article as: Dong, Q., Han, H., Liu, X., Wei, L., Zhang, W., Zhao, Z., Zhang, M.Q., Wang, X., HCSGD: an integrated database of human cellular senescence genes, *Journal of Genetics and Genomics* (2017), doi: 10.1016/j.jgg.2017.04.001.

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

HCSGD: an integrated database of human cellular senescence genes

Qiongye Dong^{a,b,1}, Hongqing Han^{a,b,1}, Xuehui Liu^{a,b,1}, Lei Wei^{a,b}, Wei Zhang^{a,b}, Zhen Zhao^{a,b}, Michael Q. Zhang^{a,b,c}, Xiaowo Wang^{a,b,*}

^a Ministry of Education Key Laboratory of Bioinformatics, Center for Synthetic and Systems Biology, Department of Automation, 100084, Tsinghua University

^b Bioinformatics Division, Tsinghua National Laboratory for Information Science and Technology, Beijing 100084, China

^c Department of Basic Medical Sciences, School of Medicine, Tsinghua University, Beijing 100084, China

¹ These authors contribute equally to this work

Correspondence: xwwang@tsinghua.edu.cn

Abstract

Cellular senescence is an irreversible cell cycle arrest program in response to various exogenous and endogenous stimuli like telomere dysfunction and DNA damage. It has been widely accepted as an anti-tumor program and is also found closely related to embryo development, tissue repair, organismal aging and age-related degenerative diseases. In the past decades, numerous efforts have been made to uncover the gene regulatory mechanisms of cellular senescence. There is a strong demand to integrate these data from various resources into one open platform. To facilitate researchers on cellular senescence, we have developed Human Cellular Senescence Gene Database (HCSGD) by integrating multiple online published data sources into a comprehensive senescence gene annotation platform (<http://bioinfo.au.tsinghua.edu.cn/member/xwwang/HCSGD>). Potential Human Cellular Senescence Genes (HCSGS) were collected by combining

Download English Version:

<https://daneshyari.com/en/article/5585904>

Download Persian Version:

<https://daneshyari.com/article/5585904>

[Daneshyari.com](https://daneshyari.com)