

综述

## 去乙酰化酶SIRT1的研究进展

陈厚早, 张祝琴, 韦玉生, 刘德培

中国医学科学院 北京协和医学院 基础医学研究所医学分子生物学国家重点实验室,北京 100005

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**摘要** 摘要: 去乙酰化酶Sir2基因家族对细胞的生存、凋亡、衰老等生理活动起着十分重要的调节作用,可能是所有生物共同的生命控制基因之一。去乙酰化酶(SIRT1)是SIR2的同源物,以许多非组蛋白和组蛋白为底物,与代谢综合征、基因稳定性、肿瘤,神经退行性疾病的发生相关。能量限制可通过增加SIRT1活性来延长啮鼠动物的寿命。因此,SIRT1可作为治疗不同疾病的靶点逐渐被人们所重视。

**关键词** [去乙酰化酶](#) [能量限制](#) [衰老](#)

分类号

## Research Progression of Deacetylase (SIRT1)

CHEN Hou-zao,ZHANG Zhu-qin,WEI Yu-sheng,LIU De-pei

National Laboratory of Medical Molecular Biology, Institute of Basic Medical Sciences,CAMS and PUMC, Beijing 100005, China

**Abstract** ABSTRACT:The silent information regulator protein 2 (Sir2) and its homologues play an important role in the regulation of cellular physiological processes such as survival,apoptosis, and aging. SIRT1, the mammalian Sir 2 homologue, has been shown to deacetylate a wide range of non-histone substrates and histone substrates. It has been constantly reported that SIRT1 may be associated with the occurrence of metabolic syndrome, genomic homeostasis, tumors, and neurodegenerative diseases. Calorie restriction may mitigate many major diseases in rodent models by SIRT1-mediated deacetylase activity and prolong the life expectancies in these animals. Therefore, SIRT1 may be emphasized as a new therapy target for many different diseases.

**Key words** [deacetylase](#) [calorie restriction](#) [ageing](#)

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通讯作者 刘德培 [liudp@pumc.edu.cn](mailto:liudp@pumc.edu.cn)

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