

Title (en)  
SIR2 ACTIVITY

Title (de)  
SIR2-AKTIVITÄT

Title (fr)  
ACTIVITE DE SIR2

Publication  
**EP 1529115 A4 20050824 (EN)**

Application  
**EP 02749837 A 20020708**

Priority  
• US 0221461 W 20020708  
• US 30337001 P 20010706  
• US 30345601 P 20010706  
• US 19015902 A 20020705

Abstract (en)  
[origin: WO03004621A2] This invention relates to methods of screening compounds that modulate cellular and organismal processes by modification of the activity of SIR2 and/or transcription factors, e.g., p53, particularly methods of screening for compounds that modify lifespan and/or metabolism of a cell or an organism by modulation of the activity of SIR2 and/or transcription factors, e.g., p53, and more particularly to methods of screening for compounds that modulate the activity of Sir2 and/or transcription factors, e.g., p53. In particular, the present invention relates to a method for screening a compound, by providing a test mixture comprising a transcription factor, Sir2, and a Sir2 cofactor with the compound, and evaluating an activity of a component of the test mixture in the presence of the compound. The invention further relates to therapeutic uses of said compounds. The invention further relates to a method of modifying the acetylation status of a transcription factor binding site on histone or DNA by raising local concentrations of Sir2.

IPC 1-7  
**C12Q 1/34**; **C12N 9/16**; **C07H 21/02**; **C07H 21/04**

IPC 8 full level  
**C12N 9/16** (2006.01); **C12Q 1/44** (2006.01)

CPC (source: EP)  
**C12Q 1/44** (2013.01); **G01N 2333/4703** (2013.01); **G01N 2333/916** (2013.01); **G01N 2500/02** (2013.01)

Citation (search report)  
• [X] MUTH VIOLA ET AL: "Acetylation of TAFI68, a subunit of TIF-IB/SL1, activates RNA polymerase I transcription", EMBO (EUROPEAN MOLECULAR BIOLOGY ORGANIZATION) JOURNAL, vol. 20, no. 6, 15 March 2001 (2001-03-15), pages 1353 - 1362, XP002334003, ISSN: 0261-4189  
• See references of WO 03004621A2

Citation (examination)  
GUARENTE, LEONARD: "SIR2 and aging - the exception that proves the rule", TRENDS IN GENETICS, vol. 17, no. 7, 1 July 2001 (2001-07-01), pages 301 - 392

Designated contracting state (EPC)  
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR IE IT LI LU MC NL PT SE SK TR

DOCDB simple family (publication)  
**WO 03004621 A2 20030116**; **WO 03004621 A3 20050317**; AU 2002320325 A2 20030121; AU 2002320325 B2 20080403; CA 2453195 A1 20030116; EP 1529115 A2 20050511; EP 1529115 A4 20050824

DOCDB simple family (application)  
**US 0221461 W 20020708**; AU 2002320325 A 20020708; CA 2453195 A 20020708; EP 02749837 A 20020708