(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :03/02/2006
(21) Application No.297/DEL/2006 A
(43) Publication Date : 17/08/2007

(54) Title of the invention : A METHOD OF CURING ANTIBIOTIC RESISTANT PLASMIDS

(51) International classification :A61K 31/05
(31) Priority Document No :NA
(32) Priority Date :NA
(33) Name of priority country :NA
(86) International Application No :NA
Filing Date :NA
(87) International Publication No :NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)COUNCIL OF SCIENTIFIC & INDUSTRIAL RESEARCH
Address of Applicant :ANUSANDHAN BHAWAN, RAFI MARG, NEW DELHI-110001, INDIA. Delhi India
2)AGHARKAR RESEARCH INSTITUTE
(72)**Name of Inventor :**
1)LATHA CHANDRAMATHI, VARSHA DUBAYYA SHRIRAM & SUPADA RAMBHAU ROJATKAR
2)SHEETAL SHRIPAD JAHAGIRDAR & PRASHANT KAMALAKAR DHAKEPHALKAR

(57) Abstract :
The subject of our invention is to identify a novel plasmid curing/antiplasmid agent from the rhizomes of Alpinia galanga (L) Swartz. The compound used in the present invention 1'acetoxychavicol acetate (ACA) with a formula Ci3Hi404is not known before as an antiplasmid agent. ACA is capable of reducing the minimal inhibitory concentration (MIC) of antibiotic required to inhibit growth of bacteria thus making the antibiotic treatment more effective in vivo and in vitro. It is capable of curing plasmids from bacterial host by reducing the copy number of plasmids in the daughter cells or by completely eliminating the plasmids in the daughter cells. Thus, ACA has a potential of eliminating or curing antibiotic resistance in bacterial cells making the bacterial population sensitive to antibiotic. A pharmaceutical composition of this compound can be used as a potential antibiotic and promising plasmid curing agent against different bacterial strains. The identification of 1 '-acetoxychavicol acetate as a compound capable of curing of antibiotic resistance plasmid has a wide range of practical applications. The invention could provide not only great economic benefit but also cure a great number of people infected with microorganisms resistant to multiple antibiotics who are actually beyond recovery because of antibiotic resistance.