Effect of adenosine derivatives to produce actinorhodin

Jungmo Young, Youhoon Chong, Yukyung Lee, Joo-Won Suh¹, Yoongho Lim Bio/Molecular Informatics Center, Konkuk University, ¹Instituteof Bioscience and Biotechnology and Department of Biological Science, Myongji University TEL: +82-2-450-3760, FAX: +82-2-453-3761

Abstract

Streptomyces coelicolor A3(2) produces many useful natural antibiotics such as actinorhodin. S.coelicolor can overproduce actinorhodin when the addition of S-adenosylmethionine (SAM) to the culture medium.1)SAM consists of adenosine moiety. We synthesized adenosine derivatives and found effects of adenosine derivatives to produce actinorhodin.

Reference

 Okamoto S, Lezhava A, Hosaka T, Okamoto-Hosoya Y, Ochi K, Enhanced expression of S-adenosylmethionine synthetase causes overproduction of actinorhodin in Streptomyces coelicolor A3(2) (2003), J. Bacteriol. 185(2), 601-9.