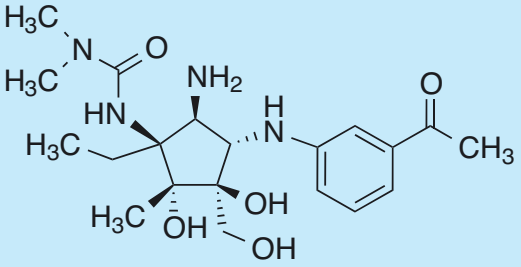
Jogyamycin

1. Discovery, producing organism and structures [1,2)]

Jogyamycin was found in a culture broth of an actinomycete strain, *Streptomyces* sp. a-WM-JG-16.2 isolated from a soil sample collected in Jogjakarta Indonesia. It was found together with the known analogs, pactamycin, 7-deoxypactamycin and pactamycate and was shown to be an antiprotozaol aminocyclopentitol. Jogyamycin exhibited highly potent *in vitro* antimalarial activity against chloroquine-resistant *Plasmodium falciparum* K1 strain parasite. It also possessed antitrypanosomal activity.



Jogyamycin

2. Physical data

Yellow powder. $C_{20}H_{32}O_5N_4$; mol wt 408.49. Sol. in MeOH.

3. Biological activity[1)]

1) *In vitro* antimalarial activity

Jogyamyicn showed potent antimalarial activity against *P. falciparum* K1 parasites, with an IC_{50} value of 1.5 nM.

2) *In vitro* antitrypanosomal activity

Jogyamyicn also diplayed potent antitrypanosomal activity against *Trypanosoma brucei brucei* GuTat3.1 strain parasites, with an IC_{50} value of 12.3 nM.

4. References

1. [1117] M. Iwatsuki *et al*., *J. Antibiot*. **65**, 169-172 (2012)