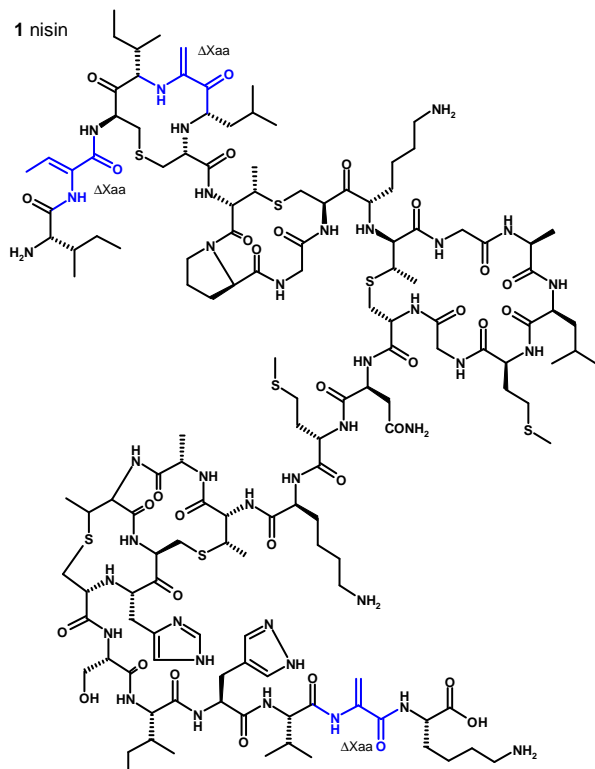
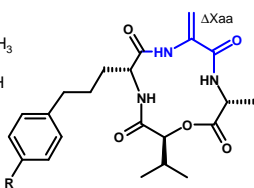


1 nisin

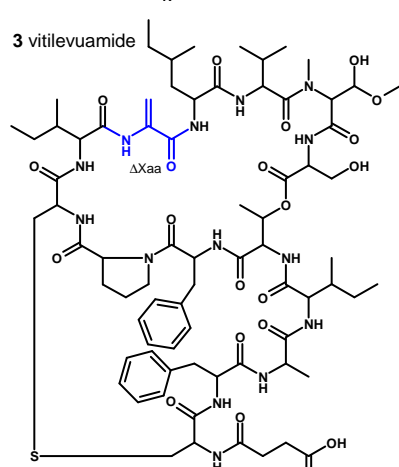


2 AM-toxins

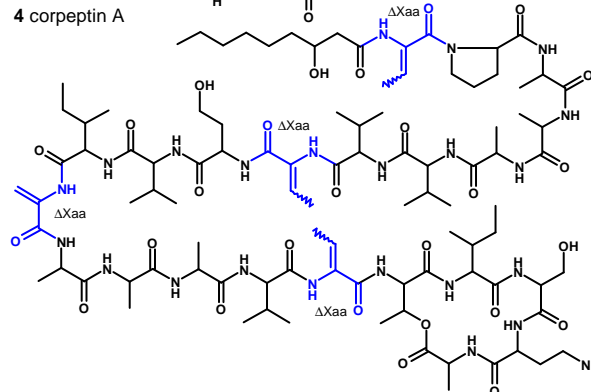
AM-toxin I, R = OCH₃
 AM-toxin II, R = H
 AM-toxin III, R = OH



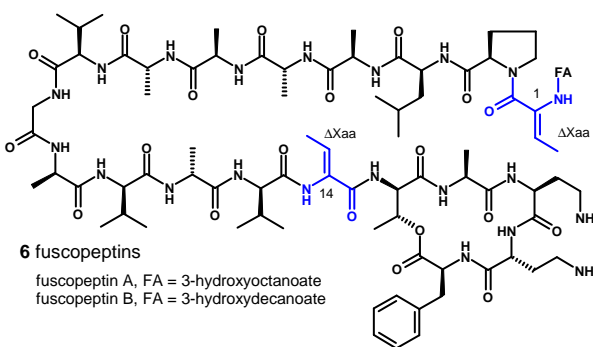
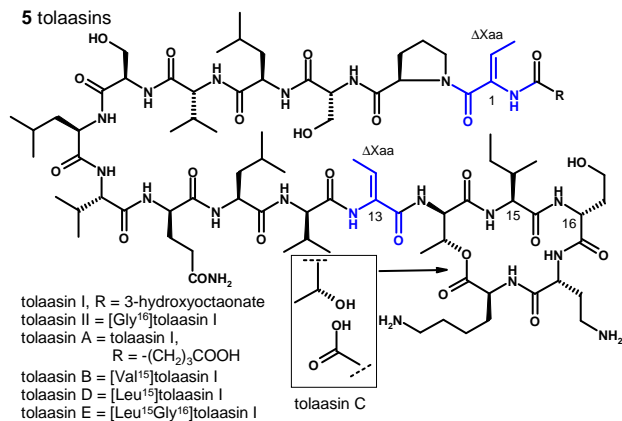
3 vitilevuamide



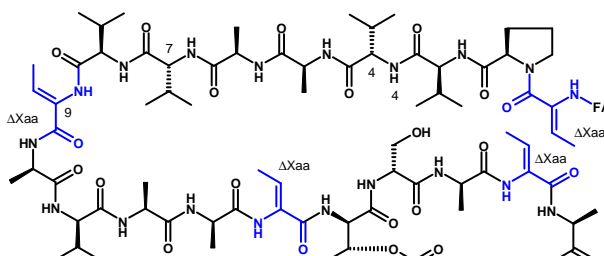
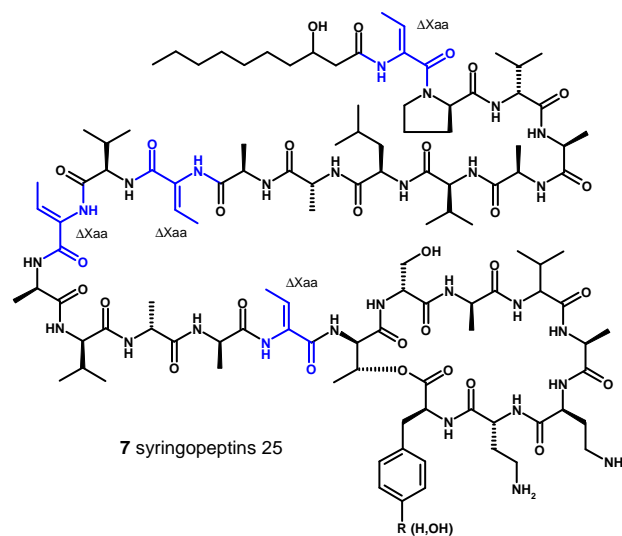
4 corpeptin A



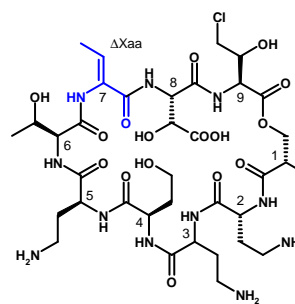
5 tolaasins



7 syringopeptins 25



syringopeptin 22A, FA = 3-hydroxydecanoate
 syringopeptin 22B, FA = 3-hydroxydodecanoate
 syringopeptin 22 Phv = [Leu⁴,Ala⁷]SP22
 syringopeptin 22 SC = [Leu⁴,Leu⁷, Δ Ala⁹]SP22
 syringopeptin 508 = [Leu⁴,Leu⁷,Ala⁹]SP22

**9 syringostatin family**

syringostatin

A, FA = tetradecanoate

B, FA = 3-hydroxytetradecanoate

syringotoxin = [Gly³]syringostatin B

syringomycins =

[D-Ser²,D-Dab³,L-Dab⁴,L-Arg⁵,L-Phe⁶]syringostatin

pseudomycins =

A, FA = 3-hydroxydecanoate

E, FA = 3-hydroxydodecanoate

G, FA = 3-hydroxytetradecanoate

pseudomycins =

[L-Asp³,L-Lys⁴,L-Orn⁵]syringostatin

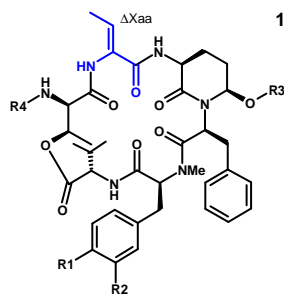
A, FA = 3,4-dihydroxydodecanoate

B, FA = 3-hydroxytetradecanoate

C, FA = 3,4-dihydroxyhexadecanoate

D, FA = 3-hydroxyhexadecanoate

cormycin A =

[D-Orn²,L-Asn³,L-His⁹]syringostatin**10 dolastatin family**

dolastatin 13

symplostatin 2

somamide A

somamide B

lyngbyastatin 4

lyngbyastatin 5

lyngbyastatin 6

lyngbyastatin 7

lyngbyastatin 8

lyngbyastatin 9

lyngbyastatin 10

bouillamide A

bouillamide B

molassamide B

R1 R2R3 R4

H H H A

OH H H B

OH H H C

OH H H D

OH H H E

OH H Me F

OH H H G

OH H H H

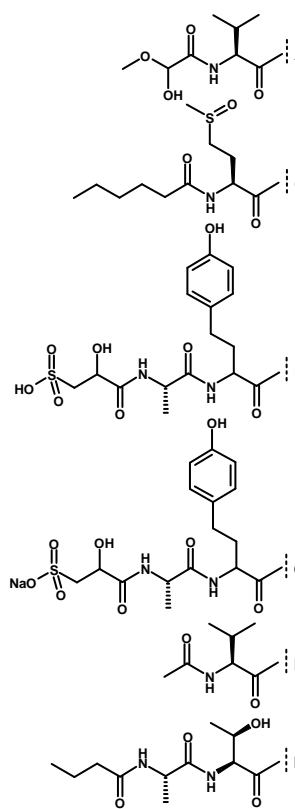
OH H H I

OH Br H J

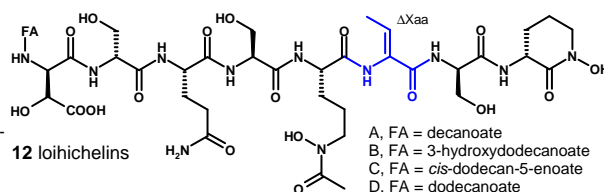
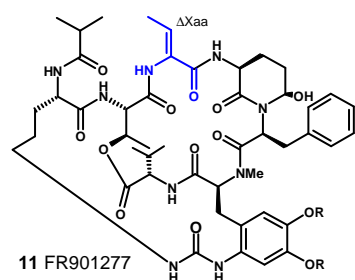
OH H H K

OH Br H K

OH H H L



11 FR901277

**12 loihichelins**

A, FA = decanoate

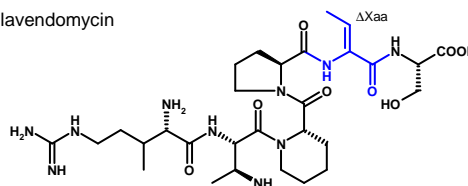
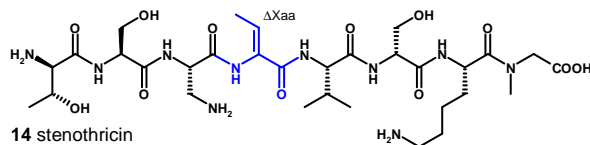
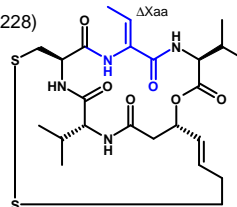
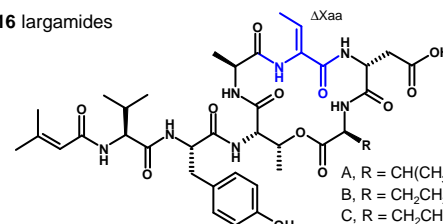
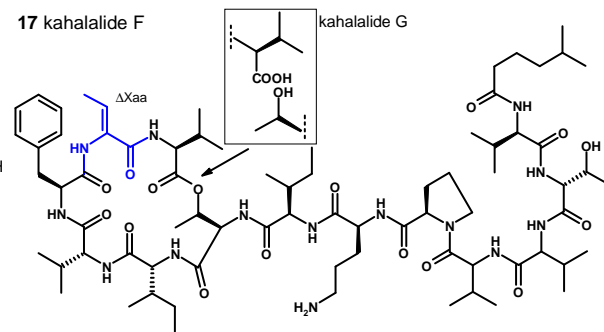
B, FA = 3-hydroxydodecanoate

C, FA = cis-dodecan-5-enoate

D, FA = dodecanoate

E, FA = cis-tetradecan-7-enoate

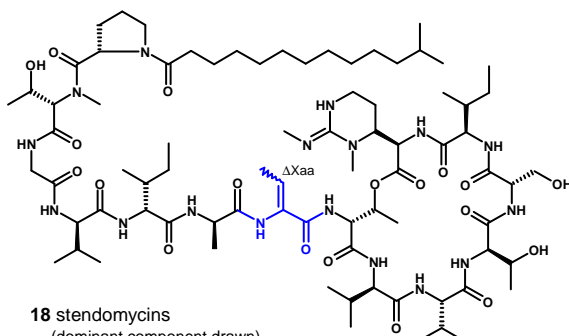
F, FA = tetradecanoate

13 lavendomycin**14 stenothricin****15 FK228 (FK901228)****16 largamides**A, R = CH(CH₃)₂B, R = CH₂CH₂-p-C₆H₄OHC, R = CH₂CH₂CH₂-p-C₆H₄OH**17 kahalalide F**

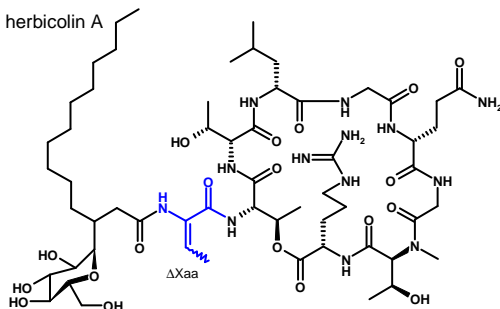
kahalalide G

18 stendomycins

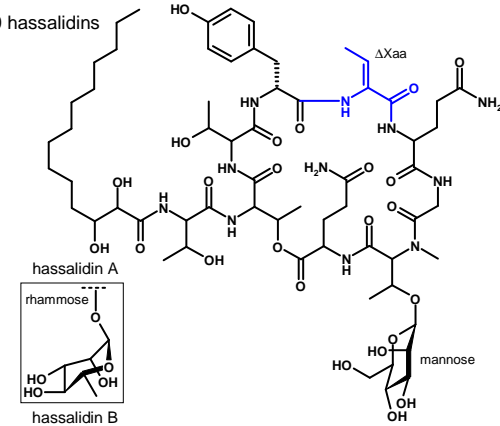
(dominant component drawn)



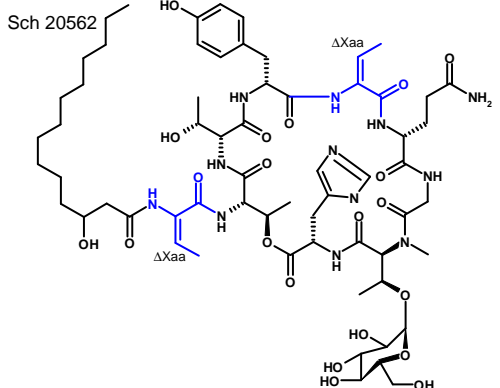
19 herbicolin A



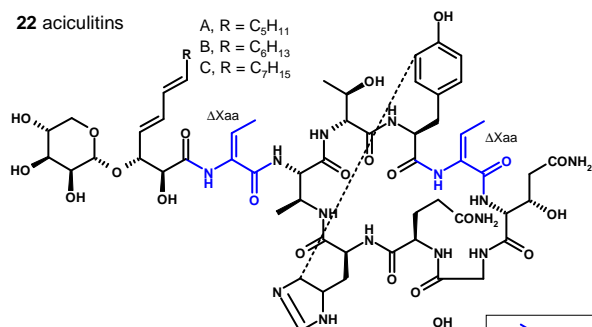
20 hassalidins



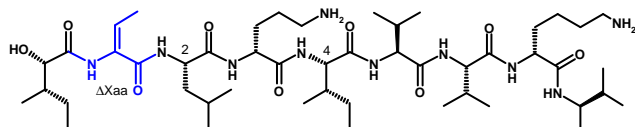
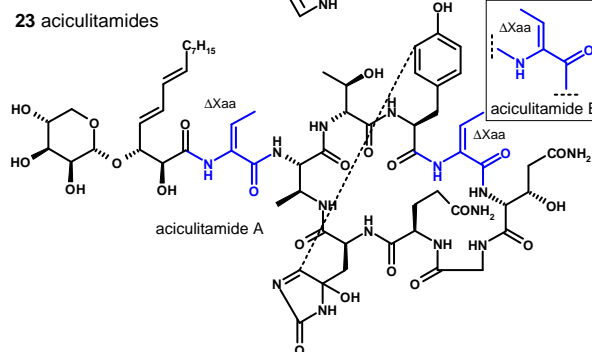
21 Sch 20562



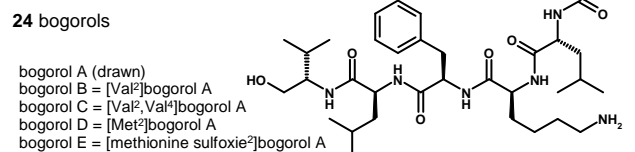
22 aciculitins



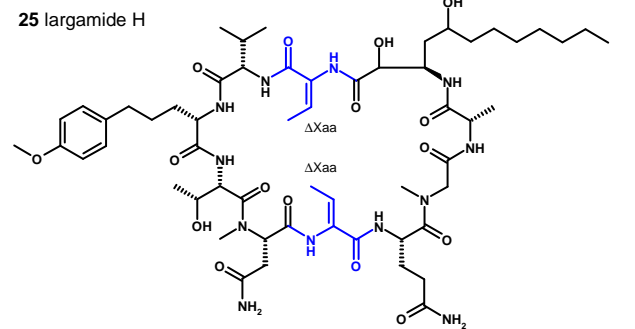
23 aciculitamides



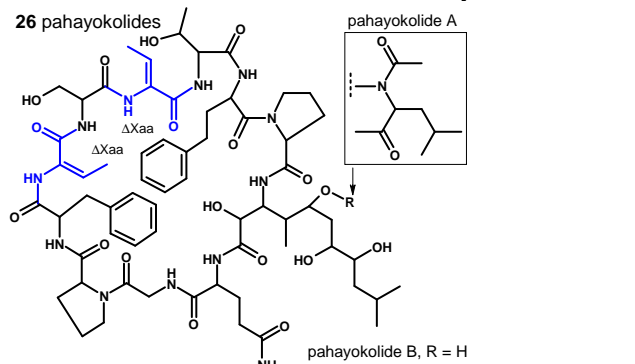
24 bogorols



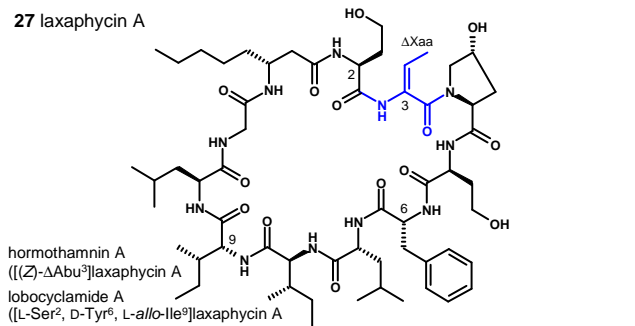
25 largamide H



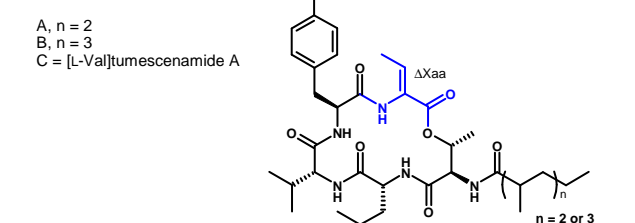
26 pahayokolides



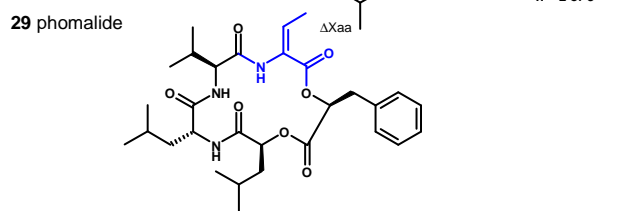
27 laxaphycin A



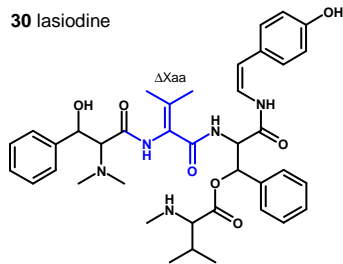
28 tumescenamides



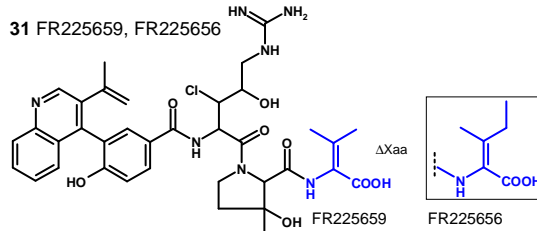
29 phomalide



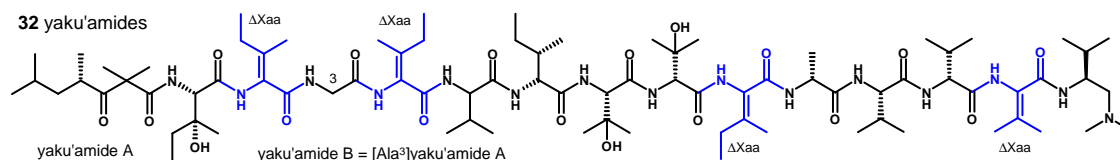
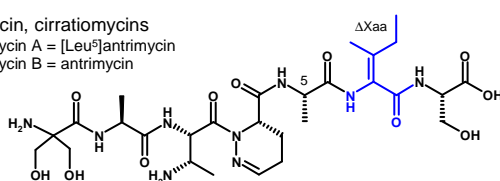
30 lasiodine



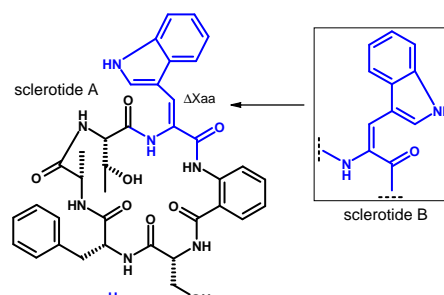
31 FR225659, FR225656



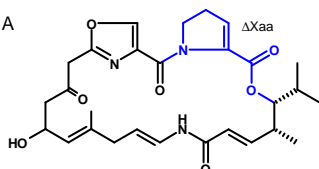
32 yaku'amides

33 antrimycin, cirratiomycins
cirratiomycin A = [Leu⁹]antrimycin
cirratiomycin B = antrimycin

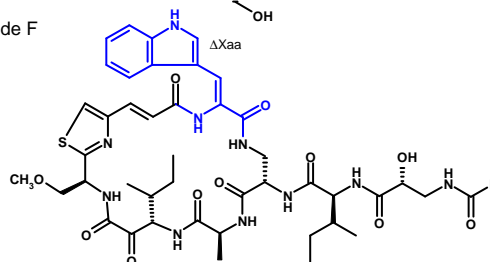
38 sclerotides



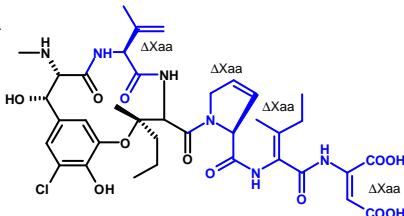
34 ostreogrycin A



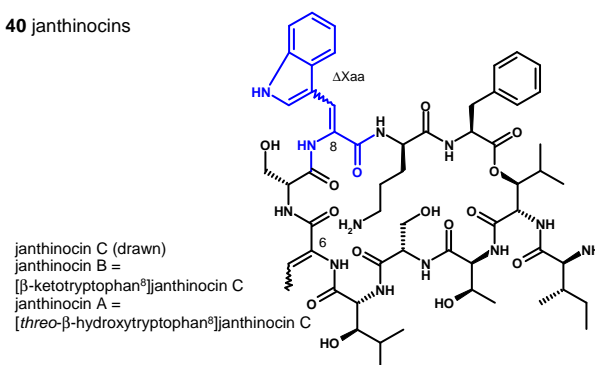
39 keramide F



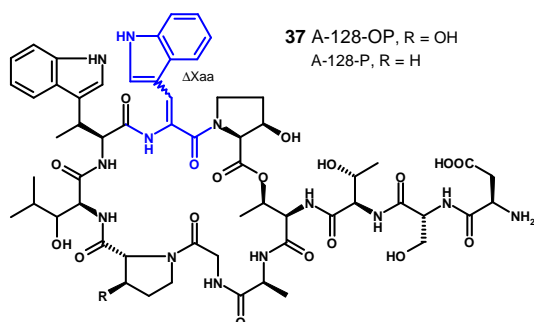
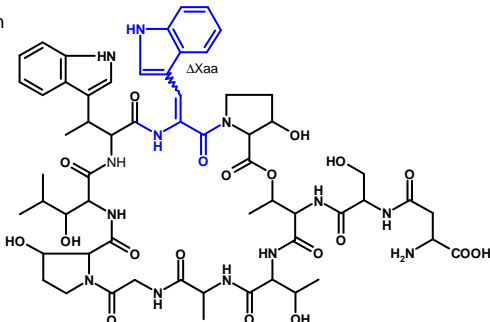
35 phomopsin A



40 janthinocins

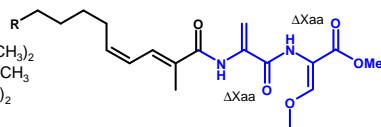


36 telomycin



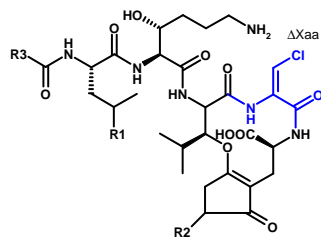
41 cyrmenins

- A, R = CH₂CH(CH₃)₂
 B₁, R = CH₂CH₂CH₃
 B₂, R = CH(CH₃)₂



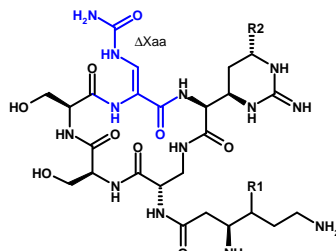
42 victorins

- R1 R2 R3
 B, CH₂Cl, OH, CH(OH)₂
 C, CHCl₂, OH, CH(OH)₂
 D, CHCl₂, H, CH(OH)₂
 E, CCl₃, OH, CH(OH)₂
 M, CHCl₂, OH, CH₂NH₂



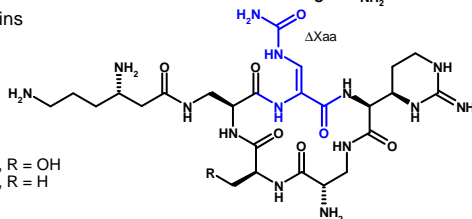
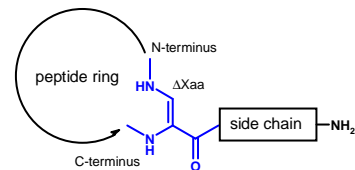
43 tuberactinomycins

- A, R1 = OH, R2 = OH
 B (viomycin), R1 = H, R2 = OH
 N, R1 = OH, R2 = H
 O, R1 = H, R2 = H



44 capreomycins

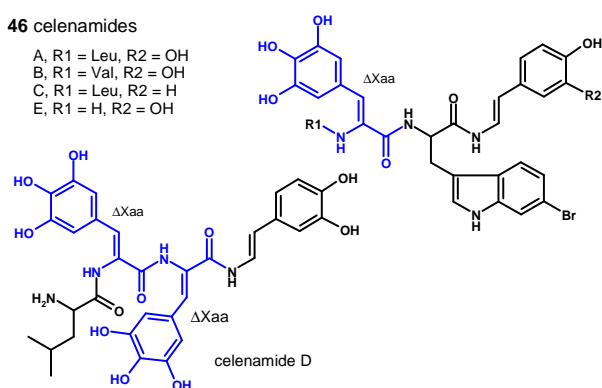
- capreomycin IA, R = OH
 capreomycin IB, R = H

45 callynormine A
callyaerins A-H

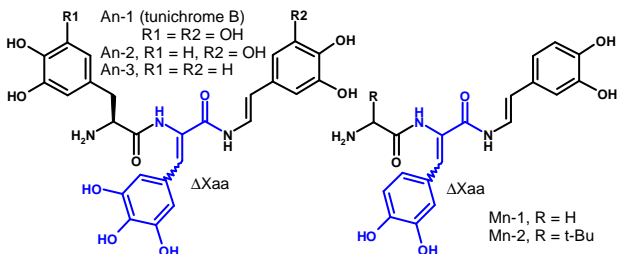
	main chain (ring)								side chain				
	R1	R2	R3	R4	R5	R6	R7	R8	C1	C2	C3	C4	C5
Callynormine A	Ile	Hyp	Val	Leu	Pro	Pro	Leu		Pro	Phe	Leu		
Callyaerins													
A	Ile	Hyp	Val	Ile	Leu	Pro	Pro	Leu	Pro	Ile	Phe	Gly	
B	Ile	Hyp	Ile	Ile	Leu	Pro	Pro	Leu	Pro	Ile	Ile		
C	His	Hyp	Leu	Leu	Pro	Pro	Val		Pro	Leu	Phe	Gly	
D	Ile	Ile	Phe	Pro	Hyp	Pro	Leu		Pro	Ile	Asn	Ala	Ile
E	Leu	Pro	Phe	Phe	Pro	Pro	Val		Pro	Ile	Ile	Gly	
F	Val	Pro	Val	Phe	Pro				Pro	Leu	Phe	Ile	
G	Leu	Pro	Pro	Pro	Pro	Leu			Pro	Phe	Phe	Phe	
H	Val	Pro	Val	Phe	Pro	Pro	Leu		Pro	Ile			
All the L form.	Hyp = 3-hydroxyproline												

46 celenamides

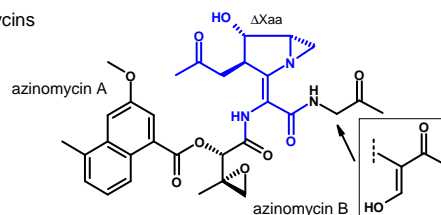
- A, R1 = Leu, R2 = OH
 B, R1 = Val, R2 = OH
 C, R1 = Leu, R2 = H
 E, R1 = H, R2 = OH



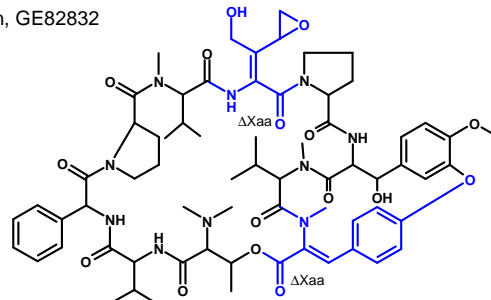
47 tunichromes



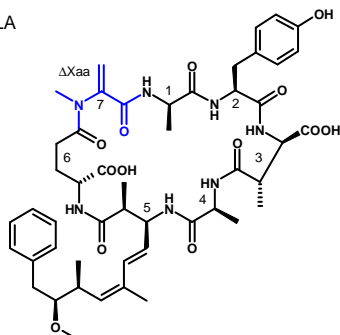
48 azinomycins



49 dityromycin, GE82832



50 microcystin-LA



51 FR900359, YM254890-2

FR900359

R1 = CH(CH₃)₂R2 = CH₂CH₃

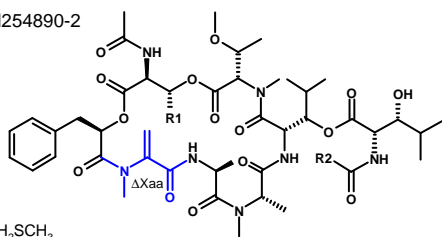
YM254890

R1 = R2 = CH₃

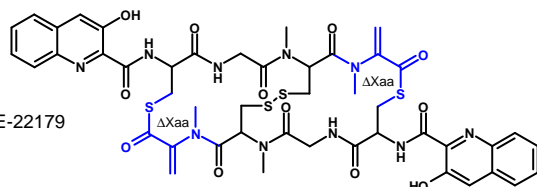
YM254891

R1 = CH₃R2 = CH₂CH₃

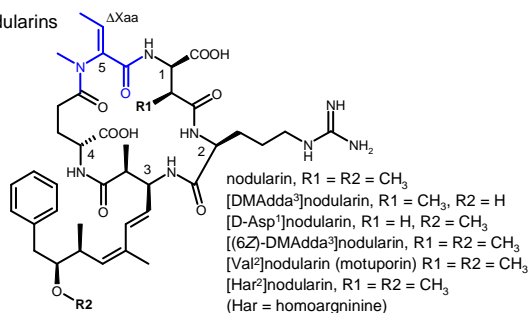
YM254892

R1 = CH₃, R2 = CH₂SCH₃

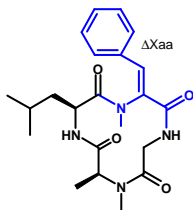
52 BE-22179



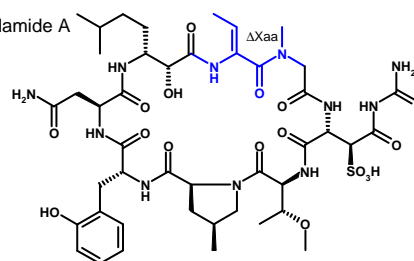
53 nodularins



54 tentoxin



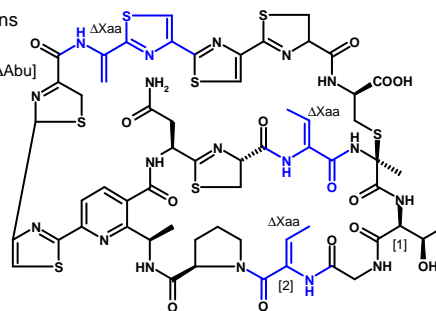
55 mutremdamide A



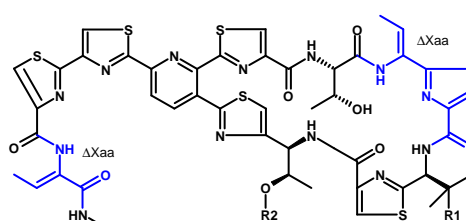
56 cyclothiazomycins

B1 [1 = Arg]

B2 [1 = Arg, 2 = (E)-ΔAbu]



57



micrococcin P1

R1 = R2 = H

R3 = (R)-CH₂CH(OH)CH₃

micrococcin P2

R1 = R2 = H,

R3 = CH₂COCH₃

thiocillin I

R1 = OH, R2 = H

R3 = (R)-CH₂CH(OH)CH₃

thiocillin II

(unknown stereochemistry)

R1 = OH, R2 = CH₃R3 = CH₂CH(OH)CH₃

thiocillin III

(unknown stereochemistry)

R1 = H, R2 = CH₃R3 = CH₂CH(OH)CH₃

YM-266183

(unknown stereochemistry)

R1 = OH, R2 = H

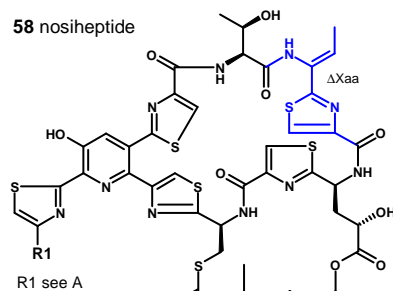
R3 = CH₂COCH₃

YM-266184

(unknown stereochemistry)

R1 = OH, R2 = CH₃R3 = CH₂COCH₃

58 nosiheptide

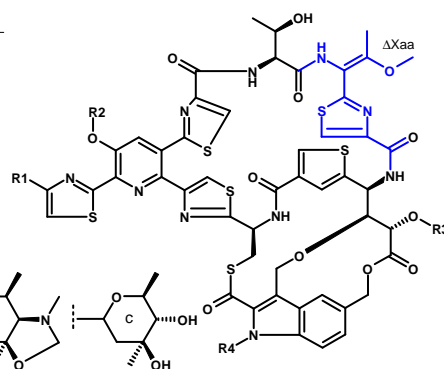
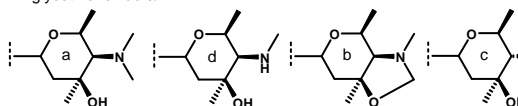


59

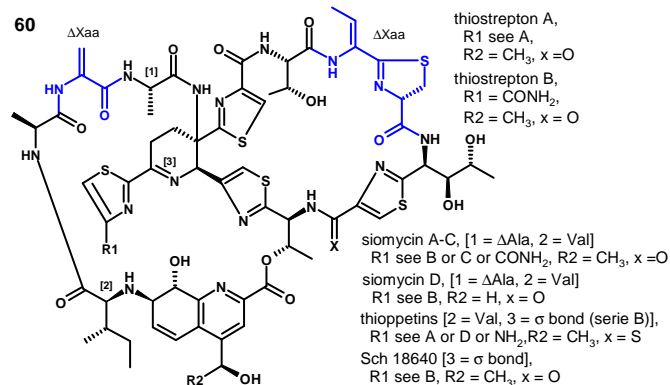
nocathiacin I (MJ347-81F4 A)
 nocathiacin II
 nocathiacin III
 nocathiacin IV
 thiazomycin A
 thiazomycin B
 thiazomycin C
 thiazomycin D
 MJ347-81F4 B
 glycothiohexide α
 O-Methyl-glycothiohexide α

R1	R2	R3	R4
see A	H	see a	OH

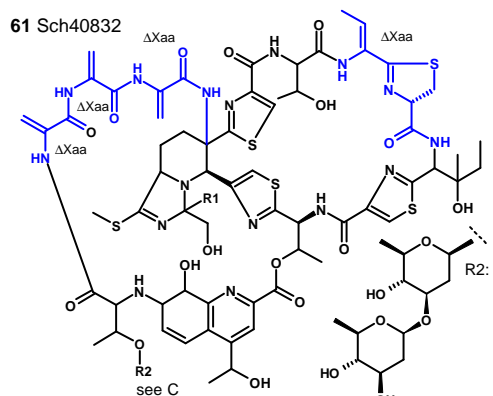
see A	H	see a	H
see A	H	H	OH
CONH2	H	see a	OH
see A	H	see b	OH
see A	H	H	H
CONH2	H	see b	H
see A	H	see c	OH
see A	H	see d	OH
CONH2	H	see a	H
CONH2	CH3	see a	H



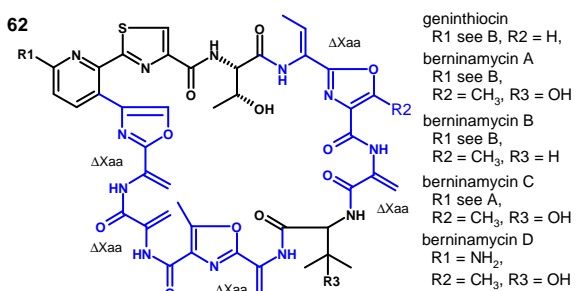
60



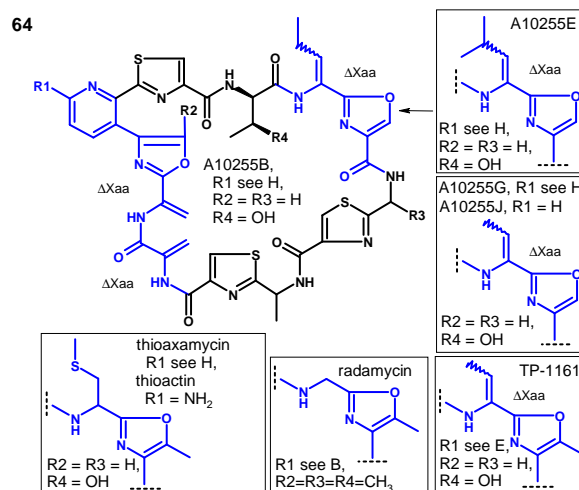
61 Sch40832



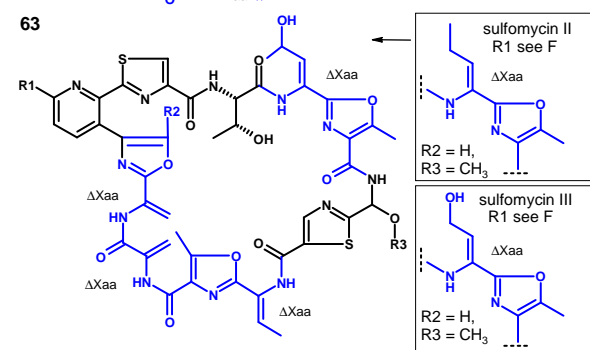
62



64



63



sulfomycin I: R1 = see F, R2 = H, R3 = CH₃

methylsulfomycin I: R1 = F, R2 = R3 = CH₃

promoinducin: R1 = H, R2 = H, R3 = CH₃

65

