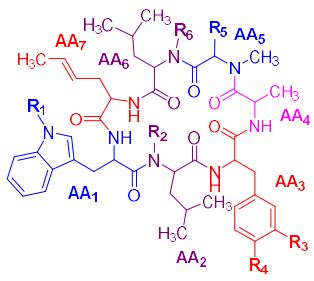
THE RUFOMYCIN REFERENCE TABLE

Adopted from: B Zhou, P Achanta, G Shetye, SN Chen, H Lee, YY Jin, J Cheng, MJ Lee, JW Suh, SH Cho, S Franzblau, G Pauli, J McAlpine. Rufomycins or Ilamycins: Naming Clarifications and Definitive Structural Assignments. Journal of Natural Products 84, 2644-2663 (**2021**) dx.doi.org/10.1021/acs.jnatprod.1c00198

Continuously updated. **Status: 11 Nov 2021**

Index							Discovering Research Groups and References					Preferred Consolidated Name[a]
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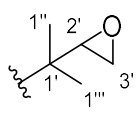
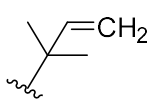
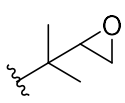
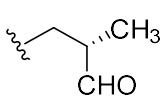
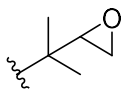
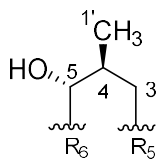
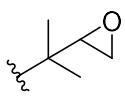
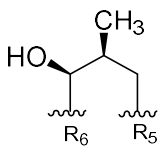
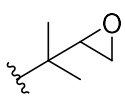
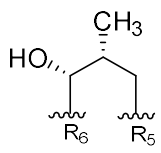
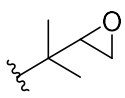
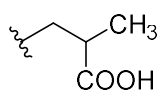
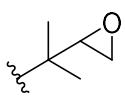
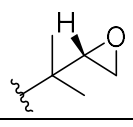
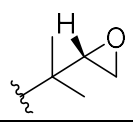
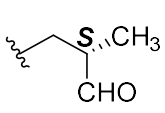
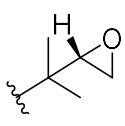
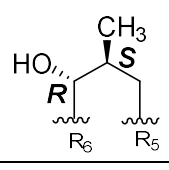
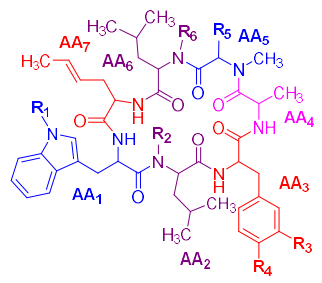
1		CH_3	NO_2	OH	IsoBu	H	rufo-mycin A[4,5]	ilamycin B_2[24]	Compound 2[8]		RUF V[20]	no recommendation due to unclear C-2′ configuration in R_1
2		CH_3	NO_2	OH	IsoBu	H	rufo-mycin B[4,5]	ilamycin B_1[6,24,25,27,28]	Compound 1[8]	ilamycin B_1[13]	**11**[23]	rufomycin 1
3		CH_3	NO_2	OH		H	rufo-mycin A[4,5]	ilamycin[14,22,24]	Compound 3[#]			no recommendation due to unclear C-2′ configuration in R_1
4		CH_3	NO_2	OH				ilamycin[22]	Compound 4[8]		RUF I[20] rufomycin I[21] **12**[23]	no recommendation due to unclear C-2′ configuration in R_1
5		CH_3	NO_2	OH					Compound 5[8]			no recommendation due to unclear C-2′ configuration in R_1
6		CH_3	NO_2	OH					Compound 6[8]		RUF II[20]	no recommendation due to unclear C-2′ configuration in R_1
7		CH_3	NO_2	OH		H			Compound 7[8]		rufomycin VII[21] RUF VII[20,21]	no recommendation due to unclear C-2′ configuration in R_1, R_5
8		H	NO_2	OH	IsoBu	H					RUF IV[20]	no recommendation due to unclear C-2′ configuration in R_1
9		CH_3	NO_2	OH	IsoBu	H				ilamycin B_2[13]	**10**[23]	rufomycin 2
10		CH_3	NO_2	OH		H						rufomycin 3[#]
11		CH_3	NO_2	OH					Compound 4[8]	ilamycin C_1[13]	RUF I[20] rufomycin I[21] **12**[23]	rufomycin 4

Index							Discovering Research Groups and References					Preferred Consolidated Name[a]
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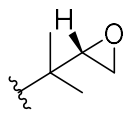
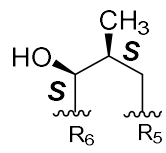
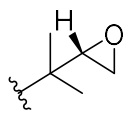
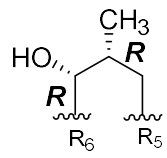
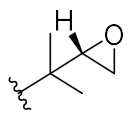
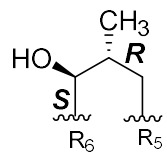
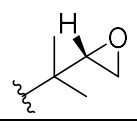
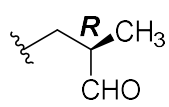
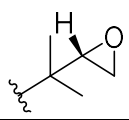
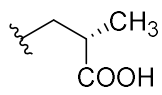
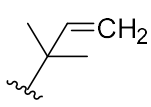
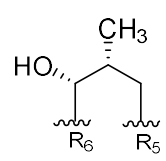
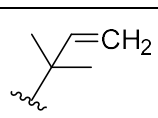
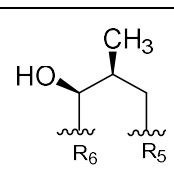
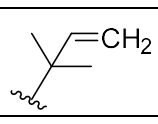
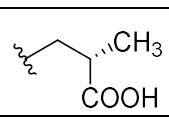
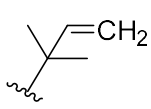
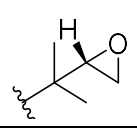
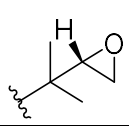
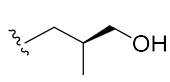
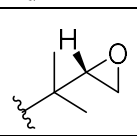
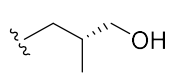
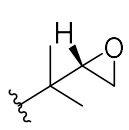
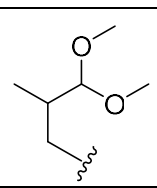
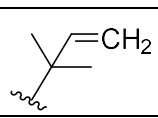
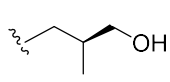
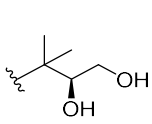
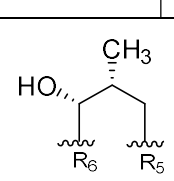
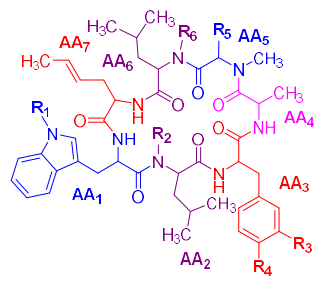
12		CH_3	NO_2	OH					Compound 5[8]	ilamycin C_2[13]		rufomycin 5
13		CH_3	NO_2	OH					Compound 6[8]		The present study	rufomycin 6
14		CH_3	NO_2	OH							The present study	rufomycin 7
15		CH_3	NO_2	OH		H						rufomycin 8[#]
16		CH_3	NO_2	OH		H				ilamycin D[13]		rufomycin 9
17		CH_3	NO_2	OH						ilamycin E_1[13,32] ilamycin E[34]	Structure revised in the present study	rufomycin 21
18		CH_3	NO_2	OH						ilamycin E_2[13]		rufomycin 22
19		CH_3	NO_2	OH		H				ilamycin F[13,32]		rufomycin 23
20		CH_3	H	OH	IsoBu	H					RUF VI[20] rufomycin NBZ4[23]	rufomycin 51
21		H	NO_2	OH	IsoBu	H					rufomycin NBZ6[23]	rufomycin 52
22		CH_3	NO_2	OH		H					rufomycin NBZ1[23]	rufomycin 11
23		CH_3	NO_2	OH		H					rufomycin NBZ2[23]	rufomycin 10
24		CH_3	NO_2	OH		H					rufomycin NBZ5[23]	rufomycin 12
25		CH_3	NO_2	OH		H					rufomycin NBZ3[23]	rufomycin 24
26		CH_3	NO_2	OH							rufomycin NBZ7[23]	rufomycin 41

Index							Discovering Research Groups and References					Preferred Consolidated Name[a]
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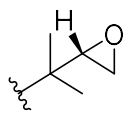
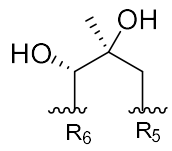
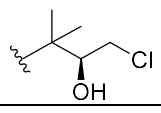
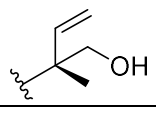
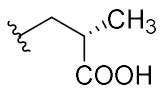
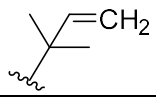
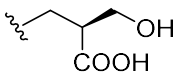
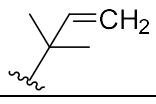
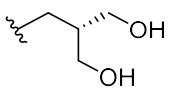
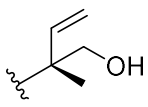
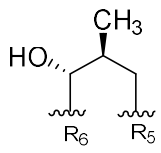
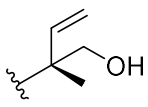
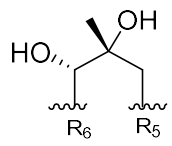
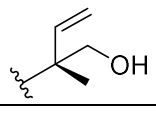
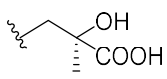
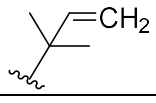
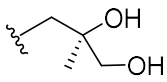
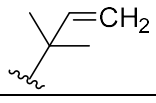
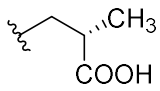
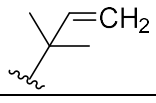
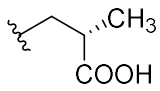
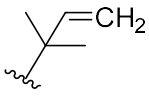
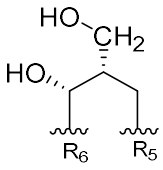
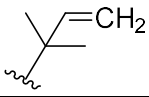
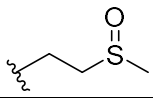
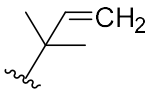
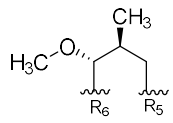
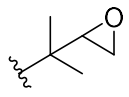
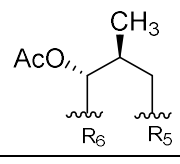
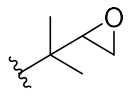
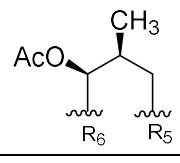
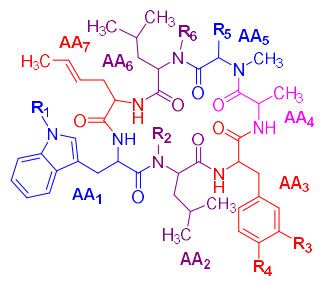
27		CH_3	NO_2	OH							rufomycin NBZ8[23]	rufomycin 13
28		CH_3	NO_2	OH	IsoBu	H					**13**[23]	rufomycin 42
29		CH_3	NO_2	OH		H				ilamycin G[33]		rufomycin 43
30		CH_3	NO_2	OH		H				ilamycin H[33]		rufomycin 25
31		CH_3	NO_2	OH		H				ilamycin I[33]		rufomycin 26
32		CH_3	NO_2	OH						ilamycin J[33]		rufomycin 44
33		CH_3	NO_2	OH						ilamycin K[33]		rufomycin 45
34		CH_3	NO_2	OH		H				ilamycin L[33]		rufomycin 46
35		CH_3	NO_2	OH		H				ilamycin M[33]		rufomycin 27
36		CH_3	NH-CHO	OH		H				ilamycin N[33]		rufomycin 53
37		CH_3	H	OH		H				ilamycin O[33]		rufomycin 54
38		CH_3	NO_2	OH						ilamycin P[33]		rufomycin 28
39		CH_3	NO_2	OH		H				ilamycin Q[33]		rufomycin 29
40		CH_3	NO_2	H						ilamycin R[33]		rufomycin 55
	Semisynthetic derivatives (rufomycinSS)											
1		CH_3	NO_2	OAc					Compound 8[8]			rufomycinSS 8
2		CH_3	NO_2	OAc					Compound 9[8]			rufomycinSS 9

Index							Discovering Research Groups and References					Preferred Consolidated Name[a]
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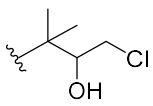
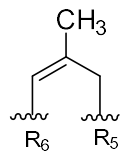
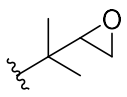
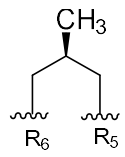
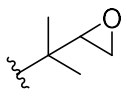
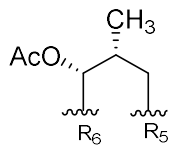
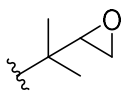
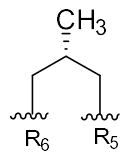
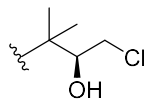
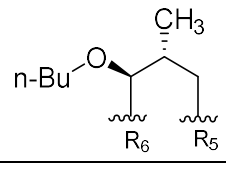
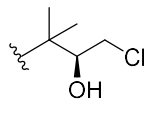
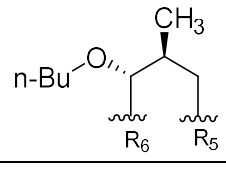
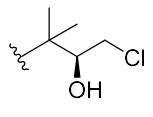
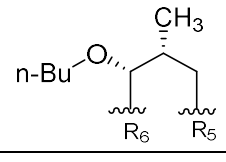
3		CH_3	NO_2	OH					Compound 10[8]			rufomycinSS 10
4		CH_3	NO_2	OH					Compound 11[8]			rufomycinSS 11
5		CH_3	NO_2	OAc					Compound 12[8]			rufomycinSS 12
6		CH_3	NO_2	OH					Compound 13[8]			rufomycinSS 13
7		CH_3	NO_2	OH							The present study	rufomycinSS 1
8		CH_3	NO_2	OH							The present study	rufomycinSS 2
9		CH_3	NO_2	OH							The present study	rufomycinSS 3

[a]The numbering used has been derived from that of the Eli Lilly scientists who were the first to discover and structurally elucidate significant numbers of this family of heptapeptides.. With the exception of rufomycin 1, an olefin, which was the first of the family to be structurally characterized, the numbers up to 20 have been reserved for epoxides on the isoprenyl group of AA1, numbers 21-40 for the corresponding olefins, 41-50 for other oxidations of this group and above 50 for variants involving changes in that precede the assembly via the NRPS. The semisynthetics (rufomycinSS) have been numbered by us and according to the Eli Lilly group the only groups that have published on semisynthetics.

[#]While these compounds have not been isolated, nor is any spectroscopic data for them available, their transitory existence is not in doubt.

Rufomycin 12 is probably not a natural product but rather an artefact of the isolation as suggested.[29] The same may be the case for rufomycin 30

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