

20140210_SEQ_12026WOPCT.txt
SEQUENCE

LISTING

<110> Bristol-Myers Squibb Company
<120> TUBULYSIN COMPOUNDS, METHODS OF
MAKING AND USE
<130> 12026-WO-PCT
<150> US 61/764825
<151> 2013-02-14
<160> 26
<170> PatentIn version 3.5
<210> 1
<211> 5
<212> PRT
<213> Homo sapiens
<400> 1

Ile Tyr Gly Met His
1 5

<210> 2
<211> 17
<212> PRT
<213> Homo sapiens

20140210_SEQ_12026WOPCT.txt

<400> 2

Val	Leu	Trp	Tyr	Asp	Gly	Ser	His	Glu	Tyr
Tyr	Ala	Asp	Ser	Val	Lys				
1				5					10
				15					

Gly

<210> 3

<211> 13

<212> PRT

<213> Homo sapiens

<400> 3

Asp	Gly	Asp	Tyr	Tyr	Asp	Ser	Gly	Ser	Pro
Leu	Asp	Tyr							
1				5					10

<210> 4

<211> 11

<212> PRT

<213> Homo sapiens

<400> 4

Arg	Ala	Ser	Gln	Ser	Val	Ser	Ser	Tyr	Leu
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

20140210_SEQ_12026WOPCT.txt

Ala
1 5 10

<210> 5
<211> 7
<212> PRT
<213> Homo sapiens

<400> 5

Asp Ala Ser Asn Arg Ala Thr
1 5

<210> 6
<211> 9
<212> PRT
<213> Homo sapiens

<400> 6

Gln Gln Arg Ser Asn Trp Pro Leu Thr
1 5

<210> 7
<211> 122
<212> PRT
<213> Homo sapiens

<400> 7

20140210_SEQ_12026WOPCT.txt

Gln	Val	His	Leu	Val	Glu	Ser	Gly	Gly	Gly
Val	Val	Gln	Pro	Gly	Arg				
1				5					10
				15					

Ser	Leu	Arg	Leu	Ser	Cys	Val	Ala	Ser	Gly
Ile	Thr	Phe	Arg	Ile	Tyr				
			20					25	
			30						

Gly	Met	His	Trp	Val	Arg	Gln	Ala	Pro	Gly
Lys	Gly	Leu	Glu	Trp	Val				
		35					40		
		45							

Ala	Val	Leu	Trp	Tyr	Asp	Gly	Ser	His	Glu
Tyr	Tyr	Ala	Asp	Ser	Val				
	50					55			
	60								

Lys	Gly	Arg	Phe	Thr	Ile	Ser	Arg	Asp	Asn
Ser	Lys	Asn	Thr	Leu	Tyr				
65					70				
75					80				

Leu	Gln	Met	Asn	Ser	Leu	Arg	Ala	Glu	Asp
Thr	Ala	Ile	Tyr	Tyr	Cys				

20140210_SEQ_12026WOPCT.txt

85
95

90

Ala	Arg	Asp	Gly	Asp	Tyr	Tyr	Asp	Ser	Gly
Ser	Pro	Leu	Asp	Tyr	Trp				
			100					105	
			110						

Gly	Gln	Gly	Thr	Leu	Val	Thr	Val	Ser	Ser
		115					120		

<210> 8
<211> 107
<212> PRT
<213> Homo sapiens

<400> 8

Glu	Ile	Val	Leu	Thr	Gln	Ser	Pro	Ala	Thr
Leu	Ser	Leu	Ser	Pro	Gly				
1				5					10
				15					

Glu	Arg	Ala	Thr	Leu	Ser	Cys	Arg	Ala	Ser
Gln	Ser	Val	Ser	Ser	Tyr				
			20					25	
			30						

20140210_SEQ_12026WOPCT.txt

Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln
Ala Pro Arg Leu Leu Ile

35

40

45

Tyr Asp Ala Ser Asn Arg Ala Thr Gly Ile
Pro Ala Arg Phe Ser Gly

50

55

60

Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr
Ile Ser Ser Leu Glu Pro

65

70

75

80

Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln
Arg Ser Asn Trp Pro Leu

85

90

95

Thr Phe Gly Gly Gly Thr Lys Val Glu Ile
Lys

100

105

<210> 9

<211> 5

<212> PRT

20140210_SEQ_12026WOPCT.txt

<213> Homo sapiens

<400> 9

Ile Tyr Ala Met Ser
1 5

<210> 10

<211> 17

<212> PRT

<213> Homo sapiens

<400> 10

Ala Ile Ser Asp Ser Gly Gly Arg Thr Tyr
Phe Ala Asp Ser Val Arg
1 5 10
15

Gly

<210> 11

<211> 11

<212> PRT

<213> Homo sapiens

<400> 11

Val Asp Tyr Ser Asn Tyr Leu Phe Phe Asp

20140210_SEQ_12026WOPCT.txt

Tyr
1 5 10

<210> 12
<211> 12
<212> PRT
<213> Homo sapiens

<400> 12

Arg Ala Ser Gln Ser Ile Ser Ser Ser Tyr
Leu Ala
1 5 10

<210> 13
<211> 7
<212> PRT
<213> Homo sapiens

<400> 13

Gly Ala Ser Ser Arg Ala Thr
1 5

<210> 14
<211> 9
<212> PRT
<213> Homo sapiens

20140210_SEQ_12026WOPCT.txt

<400> 14

Gln Gln Tyr Gly Ser Ser Pro Tyr Thr
1 5

<210> 15

<211> 120

<212> PRT

<213> Homo sapiens

<400> 15

Glu Val Gln Leu Leu Glu Ser Gly Gly Gly
Leu Val Gln Pro Gly Gly
1 5 10
15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly
Phe Thr Phe Ser Ile Tyr
20 25
30

Ala Met Ser Trp Val Arg Gln Ala Pro Gly
Lys Gly Leu Glu Trp Val
35 40
45

Ser Ala Ile Ser Asp Ser Gly Gly Arg Thr
Page 9

20140210_SEQ_12026WOPCT.txt

Tyr Phe Ala Asp Ser Val
 50 55
 60

Arg Gly Arg Phe Thr Ile Ser Arg Asp Asn
 Ser Lys Asn Thr Leu Ser
 65 70
 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp
 Thr Ala Val Tyr Tyr Cys
 85 90
 95

Ala Lys Val Asp Tyr Ser Asn Tyr Leu Phe
 Phe Asp Tyr Trp Gly Gln
 100 105
 110

Gly Thr Leu Val Thr Val Ser Ser
 115 120

<210> 16
 <211> 108
 <212> PRT
 <213> Homo sapiens
 <400> 16

20140210_SEQ_12026WOPCT.txt

Glu Ile Val Leu Thr Gln Ser Pro Gly Thr
Leu Ser Leu Ser Pro Gly
1 5 10
15

Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser
Gln Ser Ile Ser Ser Ser
20 25
30

Tyr Leu Ala Trp Tyr Gln Gln Lys Pro Gly
Gln Ala Pro Arg Leu Leu
35 40
45

Ile Tyr Gly Ala Ser Ser Arg Ala Thr Gly
Ile Pro Asp Arg Phe Ser
50 55
60

Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu
Thr Ile Ser Arg Leu Glu
65 70
75 80

Pro Glu Asp Phe Ala Val Tyr Tyr Cys Gln
Gln Tyr Gly Ser Ser Pro
Page 11

20140210_SEQ_12026WOPCT.txt

85
95

90

Tyr Thr Phe Gly Gln Gly Thr Lys Leu Glu
Ile Lys
100 105

<210> 17
<211> 5
<212> PRT
<213> Homo sapiens

<400> 17

Ser Tyr Trp Ile Ala
1 5

<210> 18
<211> 17
<212> PRT
<213> Homo sapiens

<400> 18

Ile Ile Phe Pro Gly Asp Ser Asp Thr Arg
Tyr Ser Pro Ser Phe Gln
1 5 10
15

20140210_SEQ_12026WOPCT.txt

Gly

<210> 19
<211> 8
<212> PRT
<213> Homo sapiens

<400> 19

Thr Arg Glu Gly Tyr Phe Asp Tyr
1 5

<210> 20
<211> 12
<212> PRT
<213> Homo sapiens

<400> 20

Arg Ala Val Gln Ser Val Ser Ser Ser Tyr
Leu Ala
1 5 10

<210> 21
<211> 7
<212> PRT
<213> Homo sapiens

20140210_SEQ_12026WOPCT.txt

<400> 21

Gly Ala Ser Ser Arg Ala Thr
1 5

<210> 22

<211> 8

<212> PRT

<213> Homo sapiens

<400> 22

Gln Gln Tyr Gly Ser Ser Pro Thr
1 5

<210> 23

<211> 117

<212> PRT

<213> Homo sapiens

<400> 23

Glu Val Gln Leu Val Gln Ser Gly Ala Glu
Val Lys Lys Pro Gly Glu
1 5 10
15

Ser Leu Lys Ile Ser Cys Lys Gly Ser Gly
Tyr Ser Phe Thr Ser Tyr

20140210_SEQ_12026WOPCT.txt

20 25
30

Trp Ile Ala Trp Val Arg Gln Met Pro Gly
Lys Gly Leu Glu Trp Met
35 40
45

Gly Ile Ile Phe Pro Gly Asp Ser Asp Thr
Arg Tyr Ser Pro Ser Phe
50 55
60

Gln Gly Gln Val Thr Ile Ser Ala Asp Arg
Ser Ile Arg Thr Ala Tyr
65 70
75 80

Leu Gln Trp Ser Ser Leu Lys Ala Ser Asp
Thr Ala Leu Tyr Tyr Cys
85 90
95

Ala Arg Thr Arg Glu Gly Tyr Phe Asp Tyr
Trp Gly Gln Gly Thr Leu
100 105
110

20140210_SEQ_12026WOPCT.txt

Val Thr Val Ser Ser
115

<210> 24
<211> 107
<212> PRT
<213> Homo sapiens

<400> 24

Glu	Ile	Val	Leu	Thr	Gln	Ser	Pro	Gly	Thr
Leu	Ser	Leu	Ser	Pro	Gly				
1				5					10
				15					

Glu	Arg	Ala	Thr	Leu	Ser	Cys	Arg	Ala	Val
Gln	Ser	Val	Ser	Ser	Ser				
			20					25	
			30						

Tyr	Leu	Ala	Trp	Tyr	Gln	Gln	Lys	Pro	Gly
Gln	Ala	Pro	Arg	Leu	Leu				
		35					40		
		45							

Ile	Tyr	Gly	Ala	Ser	Ser	Arg	Ala	Thr	Gly
Ile	Pro	Asp	Arg	Phe	Ser				
	50					55			

60

Gly	Ser	Gly	Ser	Gly	Thr	Asp	Phe	Thr	Leu
Thr	Ile	Ser	Arg	Leu	Glu				
65					70				
75					80				

Pro	Glu	Asp	Phe	Ala	Val	Tyr	Tyr	Cys	Gln
Gln	Tyr	Gly	Ser	Ser	Pro				
				85					90
				95					

Thr	Phe	Gly	Gly	Gly	Thr	Lys	Val	Glu	Ile
Lys									
				100				105	

<210> 25
 <211> 327
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Modified Antibody Constant Region

<400> 25

Ala	Ser	Thr	Lys	Gly	Pro	Ser	Val	Phe	Pro
Leu	Ala	Pro	Cys	Ser	Arg				

1 5 10
15

Ser Thr Ser Glu Ser Thr Ala Ala Leu Gly
Cys Leu Val Lys Asp Tyr
20 25
30

Phe Pro Glu Pro Val Thr Val Ser Trp Asn
Ser Gly Ala Leu Thr Ser
35 40
45

Gly Val His Thr Phe Pro Ala Val Leu Gln
Ser Ser Gly Leu Tyr Ser
50 55
60

Leu Ser Ser Val Val Thr Val Pro Ser Ser
Ser Leu Gly Thr Lys Thr
65 70
75 80

Tyr Thr Cys Asn Val Asp His Lys Pro Ser
Asn Thr Lys Val Asp Lys
85 90
95

20140210_SEQ_12026WOPCT.txt

Arg	Val	Glu	Ser	Lys	Tyr	Gly	Pro	Pro	Cys
Pro	Pro	Cys	Pro	Ala	Pro				
			100					105	
			110						

Glu	Ala	Glu	Gly	Gly	Pro	Ser	Val	Phe	Leu
Phe	Pro	Pro	Lys	Pro	Lys				
		115					120		
		125							

Asp	Thr	Leu	Met	Ile	Ser	Arg	Thr	Pro	Glu
Val	Thr	Cys	Val	Val	Val				
	130					135			
	140								

Asp	Val	Ser	Gln	Glu	Asp	Pro	Glu	Val	Gln
Phe	Asn	Trp	Tyr	Val	Asp				
145					150				
155					160				

Gly	Val	Glu	Val	His	Asn	Ala	Lys	Thr	Lys
Pro	Arg	Glu	Glu	Gln	Phe				
				165					170
				175					

Asn	Ser	Thr	Tyr	Arg	Val	Val	Ser	Val	Leu
Thr	Val	Leu	His	Gln	Asp				

Page 19

20140210_SEQ_12026WOPCT.txt

180 185
190

Trp	Leu	Asn	Gly	Lys	Glu	Tyr	Lys	Cys	Lys
Val	Ser	Asn	Lys	Gly	Leu				
		195					200		
		205							

Pro	Ser	Ser	Ile	Glu	Lys	Thr	Ile	Ser	Lys
Ala	Lys	Gly	Gln	Pro	Arg				
	210					215			
	220								

Glu	Pro	Gln	Val	Tyr	Thr	Leu	Pro	Pro	Ser
Gln	Glu	Glu	Met	Thr	Lys				
225					230				
235					240				

Asn	Gln	Val	Ser	Leu	Thr	Cys	Leu	Val	Lys
Gly	Phe	Tyr	Pro	Ser	Asp				
				245					250
				255					

Ile	Ala	Val	Glu	Trp	Glu	Ser	Asn	Gly	Gln
Pro	Glu	Asn	Asn	Tyr	Lys				
			260					265	
			270						

20140210_SEQ_12026WOPCT.txt

Thr	Thr	Pro	Pro	Val	Leu	Asp	Ser	Asp	Gly
Ser	Phe	Phe	Leu	Tyr	Ser				
		275					280		
		285							

Arg	Leu	Thr	Val	Asp	Lys	Ser	Arg	Trp	Gln
Glu	Gly	Asn	Val	Phe	Ser				
	290					295			
	300								

Cys	Ser	Val	Met	His	Glu	Ala	Leu	His	Asn
His	Tyr	Thr	Gln	Lys	Ser				
305					310				
315					320				

Leu	Ser	Leu	Ser	Leu	Gly	Lys
				325		

<210> 26
 <211> 330
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Modified Antibody Constant Region

<400> 26

20140210_SEQ_12026WOPCT.txt

Ala	Ser	Thr	Lys	Gly	Pro	Ser	Val	Phe	Pro
Leu	Ala	Pro	Ser	Ser	Lys				
1				5					10

15

Ser	Thr	Ser	Gly	Gly	Thr	Ala	Ala	Leu	Gly
Cys	Leu	Val	Lys	Asp	Tyr				
			20						25

30

Phe	Pro	Glu	Pro	Val	Thr	Val	Ser	Trp	Asn
Ser	Gly	Ala	Leu	Thr	Ser				
		35							40

45

Gly	Val	His	Thr	Phe	Pro	Ala	Val	Leu	Gln
Ser	Ser	Gly	Leu	Tyr	Ser				
	50					55			

60

Leu	Ser	Ser	Val	Val	Thr	Val	Pro	Ser	Ser
Ser	Leu	Gly	Thr	Gln	Thr				
65					70				

75

80

Tyr	Ile	Cys	Asn	Val	Asn	His	Lys	Pro	Ser
Asn	Thr	Lys	Val	Asp	Lys				
				85					90

20140210_SEQ_12026WOPCT.txt
95

Arg	Val	Glu	Pro	Lys	Ser	Cys	Asp	Lys	Thr
His	Thr	Cys	Pro	Pro	Cys				
			100					105	
			110						

Pro	Ala	Pro	Glu	Phe	Asp	Gly	Gly	Pro	Ser
Val	Phe	Leu	Phe	Pro	Pro				
		115					120		
		125							

Lys	Pro	Lys	Asp	Thr	Leu	Met	Ile	Ser	Arg
Thr	Pro	Glu	Val	Thr	Cys				
	130					135			
	140								

Val	Val	Val	Asp	Val	Ser	Gln	Glu	Asp	Pro
Glu	Val	Gln	Phe	Asn	Trp				
145					150				
155					160				

Tyr	Val	Asp	Gly	Val	Glu	Val	His	Asn	Ala
Lys	Thr	Lys	Pro	Arg	Glu				
				165					170
			175						

20140210_SEQ_12026WOPCT.txt

Glu	Gln	Phe	Asn	Ser	Thr	Tyr	Arg	Val	Val
Ser	Val	Leu	Thr	Val	Leu				

180

185

190

His	Gln	Asp	Trp	Leu	Asn	Gly	Lys	Glu	Tyr
Lys	Cys	Lys	Val	Ser	Asn				

195

200

205

Lys	Gly	Leu	Pro	Ser	Ser	Ile	Glu	Lys	Thr
Ile	Ser	Lys	Ala	Lys	Gly				

210

215

220

Gln	Pro	Arg	Glu	Pro	Gln	Val	Tyr	Thr	Leu
Pro	Pro	Ser	Gln	Glu	Glu				

225

230

235

240

Met	Thr	Lys	Asn	Gln	Val	Ser	Leu	Thr	Cys
Leu	Val	Lys	Gly	Phe	Tyr				

245

250

255

Pro	Ser	Asp	Ile	Ala	Val	Glu	Trp	Glu	Ser
Asn	Gly	Gln	Pro	Glu	Asn				

260

265

20140210_SEQ_12026WOPCT.txt
270

Asn	Tyr	Lys	Thr	Thr	Pro	Pro	Val	Leu	Asp
Ser	Asp	Gly	Ser	Phe	Phe				
		275					280		
		285							

Leu	Tyr	Ser	Arg	Leu	Thr	Val	Asp	Lys	Ser
Arg	Trp	Gln	Glu	Gly	Asn				
	290					295			
	300								

Val	Phe	Ser	Cys	Ser	Val	Met	His	Glu	Ala
Leu	His	Asn	His	Tyr	Thr				
305					310				
315					320				

Gln	Lys	Ser	Leu	Ser	Leu	Ser	Leu	Gly	Lys
				325					330