

(19)



(12)

(10)

(45)

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(21)	201810560947.6		<i>C07C 323/58</i> (2006.01)
(22)	2018.06.04	(56)	
(65)			CN 104418779 A, 2015.03.18, 6, 7.
	CN 108586298 A		CN 103113273 A, 2013.05.22, .
(43)	2018.09.28		CN 101851185 A, 2010.10.06, .
(73)			
	453007		
	46		
(72)			
(74)		( ) 41139	
(51)	I .C .		
	<i>C07C 319/14</i> (2006.01)		

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(54)

(57)

3

3

L

0.1%

1. L- 3- 3-

3-  
1 L- 3-  
-20\_100 HPLC pH 5\_6  
N,N-

1: 1\_1: 3 L- 3-  
3- 5: 1\_20: 1  
0.5: 1\_3: 1 L- 5: 1\_20: 1  
2

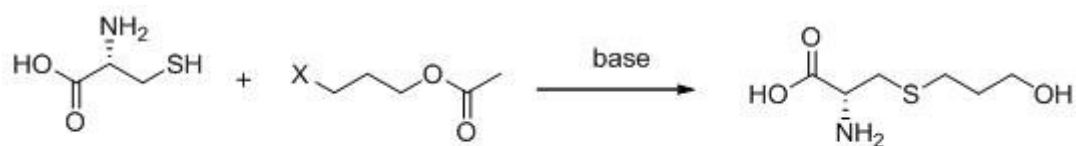
99.9%

2. 1 2

3. 1 2

3: 1\_10: 1

4. 2 1\_5: 1  
1



X=F, Cl, Br, I

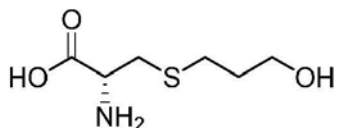
0001

0002

(Fudosteine)

3-

0003



0004

0005

L-

L-

JP8119932A

L-

CN105968035A CN105777595A CN105622474A

L-

3-

-1-

3-

-1-

3-

-1-

(CN104418779A Bi ochemi stry 1991, 30, 4078-4081.)

3-

-1-

(CN101851185A)

(Bi ochemi stry 1991, 30, 4078-4081.)

L-

3- -1-

pH

3- -1-

L-

L-

(CN1054616023A

CN104326954A)

L-

pH

0006

0.1

0007

3-

L-

3-

pH

0008

0009

0010 (1) L- 3- 3- L-  
 -20 100 HPLC pH 5-6

0011 (2)

0012 (1)  
 N,N-

0013 (1) L- 3- 1: 1 1:  
 3 L- 1: 2 1: 5

0014 (1) 3- 5: 1  
 20: 1 3- 0.5: 1 3: 1  
 L-

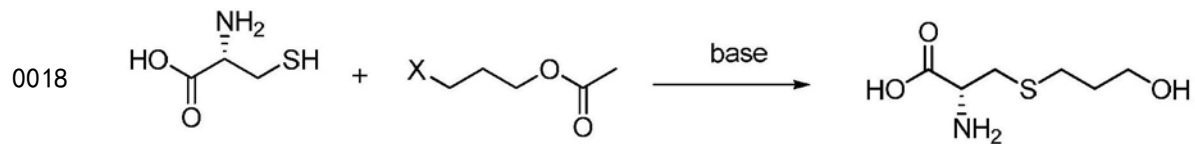
5: 1 20: 1

0015 (2)

0016 (2)

3: 1 10: 1 2: 1 5: 1

0017



	1h			90g		1h	
	19.2g	97.5	HPLC	99.9		0.1	
0025	2						
0026		64g(0.6mol)		290g		30	
	L-	14.5g(0.12mol)		100		3-	
	50g(0.37mol)	(150g)	HPLC			290g	
		pH 5-6					
0027						460g	1h
	1h			230g		1h	
	21.1g	98.2	HPLC	99.9		0.1	
0028	3						
0029		25g(0.44mol)		500g		0	
	L-	26.6g(0.22mol)		3-		50g	
	(0.22mol)	(25g)	HPLC	266g			
		pH 5-6					
0030						720g	1h
	1h			270g		1h	
	38.9g	98.8	HPLC	99.9		0.1	
0031	4						
0032		102g(0.74mol)		300g		5	
	L-	44.8g(0.37mol)		3-		30g	
	(0.25mol)	(24g)	HPLC	440g			
		pH 5-6					
0033						800g	1h
	1h			350g		1h	
	65.3g	98.6	HPLC	99.9		0.1	
0034	5						
0035		73g(1.83mol)		1000g		5	
	L-	88.4g(0.73mol)		3-		100g	
	(0.73mol)	(50g)	HPLC	300g			
		pH 5-6					
0036						1200g	1h
	1h			750g		1h	
	129.6g	99.2	HPLC	99.9		0.1	
0037	6						
0038		N,N-		220ml(1.26mol)		1000g	
	8	L-		50.8g(0.42mol)		3-	
	100g(0.55mol)	(50g)	HPLC			300g	
		pH 5-6					

0039					550g	1h
	1h			550g	1h	
	74.2g	98.6	HPLC	99.9	0.1	
0040	7					
0041		415mL (3mol)		2000g		20
	L- (100g)	242.3g (2mol)		3- 2000g		200g (1.67mol)
	HPLC					
	pH 5-6					
0042					4000g	1h
	1h			2000g	1h	
	352.8g	98.5	HPLC	99.9	0.1	
0043	8					
0044		8.8g (0.22mol)		100g		-20
	L- (0.11mol)	13.3g (0.11mol)		3-		20g
	HPLC	67g			pH 5-6	
0045					135g	1h
	1h			90g	1h	
	19.2g	97.5	HPLC	99.9	0.1	
0046						