

Design and Synthesis of Tryptophan Containing Dipeptide Derivatives as Formyl Peptide Receptors 1 Antagonist

Tsong-Long Hwang, Chih-Hao Hung, Yin-Ting Huang, Pei-Wen Hsieh *

*Graduate Institute of Natural Products, School of Traditional Chinese Medicine, College of Medicine,
Chang Gung University, Taoyuan 33302, Taiwan.*

*Corresponding authors. P.W.H. Tel: +886-3-211-8800, ext. 3105. Fax: +886-3-211-8643. E-mail:
pewehs@mail.cgu.edu.tw.

Supporting Information

Contents:

HPLC analysis of the target compounds.

HPLC analysis of the final compounds.

Compound purities were determined by two diverse HPLC conditions.

HPLC conditions No.1:

System: Jasco PU-1580 intelligent HPLC PUMP,

Jasco AS-1555-10 intelligent sampler

Detector: Jasco UV-Vis detector, 254 nm

Column: Ascentis[®] C-18 (SUPELCU[™] analytical), 5µm, 4.6 mm x 250 mm

Mobile phase: 75% MeOH/H₂O

Mode: Isocratic system

Flow rate: 1 mL / min

HPLC conditions No.2:

System: Jasco PU-1580 intelligent HPLC PUMP,

Jasco AS-1555-10 intelligent sampler

Detector: Jasco UV-Vis detector, 254 nm

Column: Ascentis[®] C-18 (SUPELCU[™] analytical), 5µm, 4.6 mm x 250 mm

Mobile phase: A: 60% MeCN/H₂O

Mode: Isocratic system

Flow rate: 1 mL / min

HPLC analysis of the final compounds

HPLC condition No.1					
Compounds	Retention time (min)	Purity (area %)	Compounds	Retention time (min)	Purity (area %)
3	5.8	97.5	19a	7.6	98.5
4	6.5	97.9	19b	8.1	98.5
5	8.8	96.1	20a	6.1	97.3
6	7.2	96.0	20b	7.5	97.2
7	5.9	96.7	21a	8.2	98.2
8	7.9	97.4	21b	8.8	96.3
9	7.7	98.0	22a	8.9	96.3
10	8.0	98.9	22b	9.5	98.7
11a	3.6	98.8	23a	8.8	97.1
11b	3.9	98.5	23b	9.4	98.2
12a	3.1	97.5	24a	10.9	98.1
12b	3.4	98.9	24b	11.7	96.6
13a	4.9	99.8	27a	4.5	97.8
13b	5.0	99.3	27b	4.4	98.0
15a	4.4	99.2	30	6.2	98.8
15b	4.3	96.2			
18a	5.6	98.2			
18b	5.8	96.6			

HPLC condition No.2					
Compounds	Retention time (min)	Purity (area %)	Compounds	Retention time (min)	Purity (area %)
3	6.7	98.2	19a	8.3	98.2
4	7.4	97.8	19b	8.7	96.1
5	9.5	96.7	20a	6.9	97.3
6	8.2	96.4	20b	7.2	96.8
7	6.5	98.4	21a	8.9	97.4
8	7.1	96.3	21b	9.3	96.7
9	7.9	97.5	22a	9.6	96.8
10	11.7	98.7	22b	10.0	97.4
11a	3.9	98.8	23a	10.1	97.8
11b	4.0	96.9	23b	10.6	99.2
12a	2.9	98.6	24a	12.5	97.7
12b	3.0	99.0	24b	12.6	96.2
13a	4.1	98.8	27a	4.8	98.9
13b	4.2	99.1	27b	4.7	98.6
15a	4.1	98.6	30	5.6	98.6
15b	4.0	96.8			
18a	6.3	97.1			
18b	6.5	97.0			