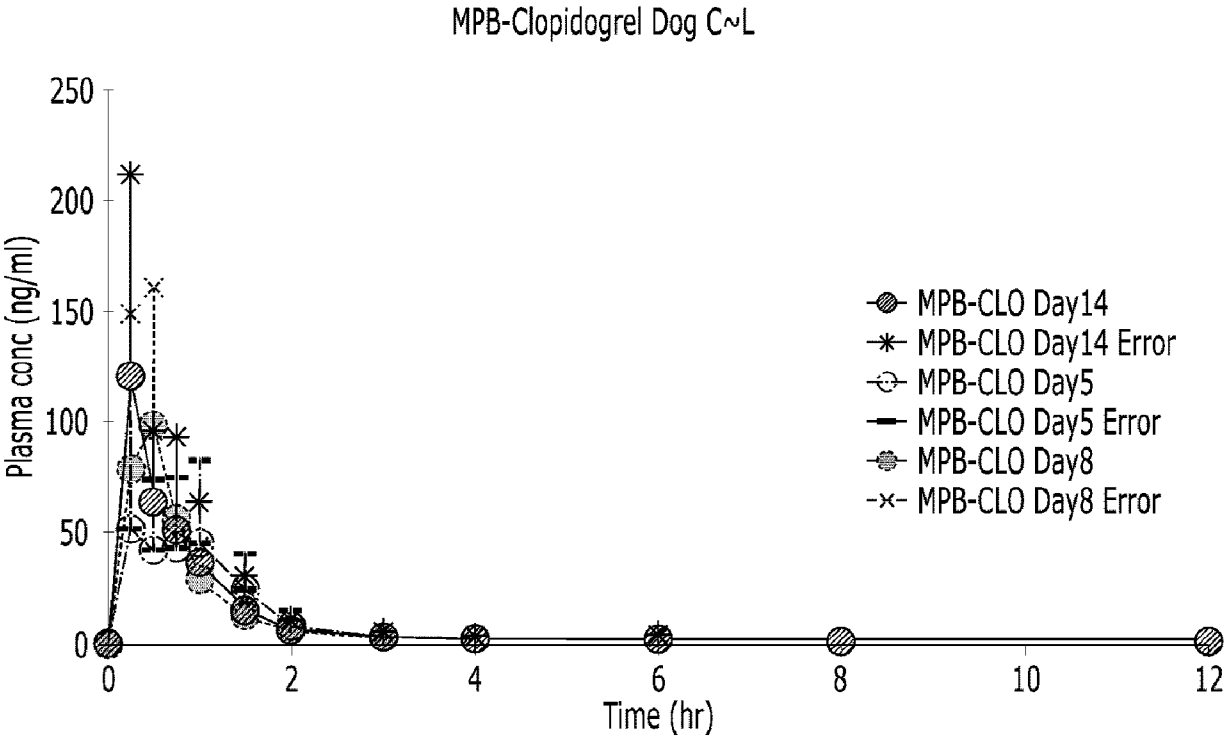
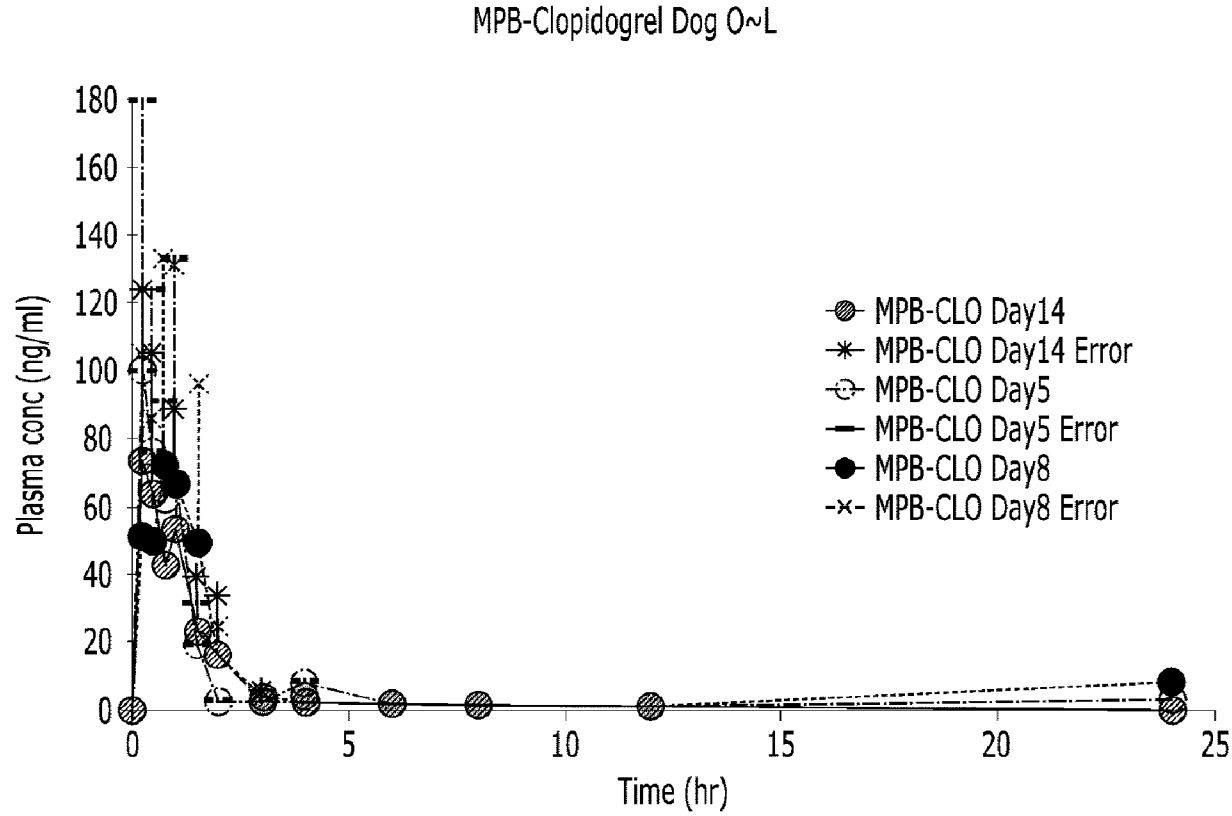
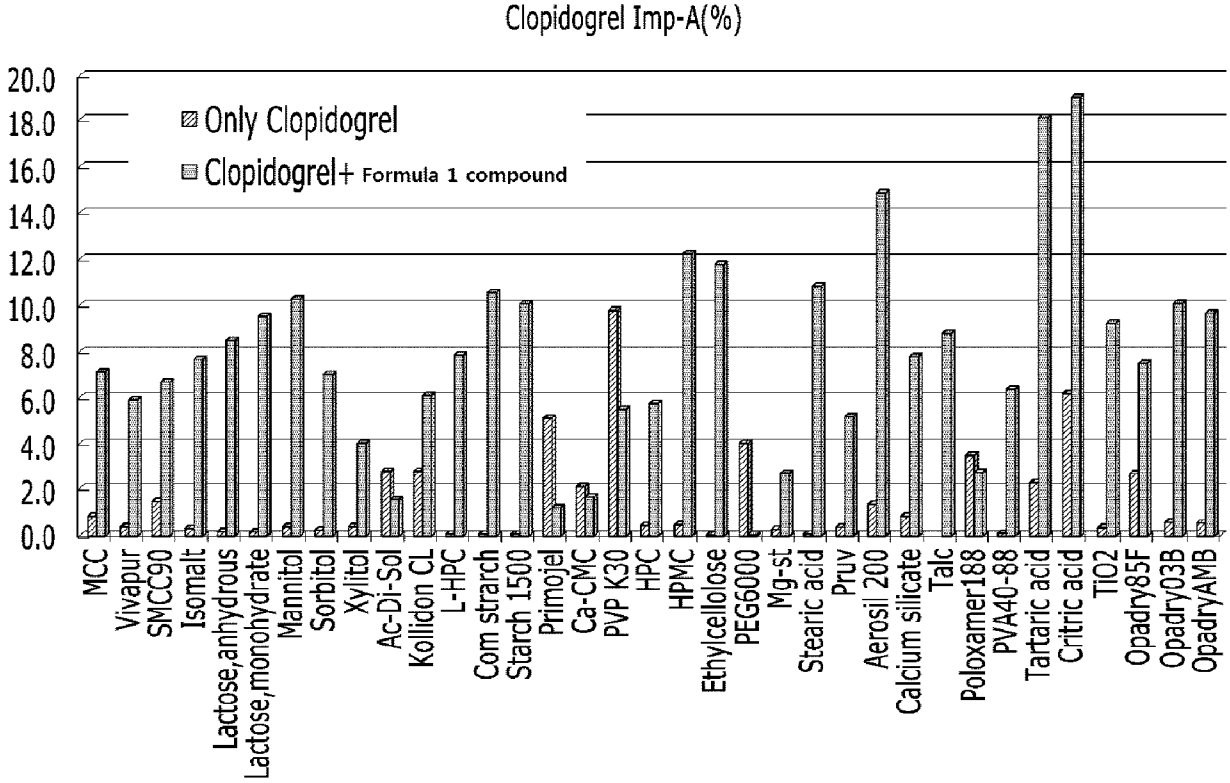
[Fig. 1]


MPB-Clopidogrel Dog C~L
Plasma conc (ng/ml)
250
200
150
100
50
0
0
2
4
6
8
10
12
Time (hr)
MPB-CLO Day14
MPB-CLO Day14 Error
MPB-CLO Day5
MPB-CLO Day5 Error
MPB-CLO Day8
MPB-CLO Day8 Error

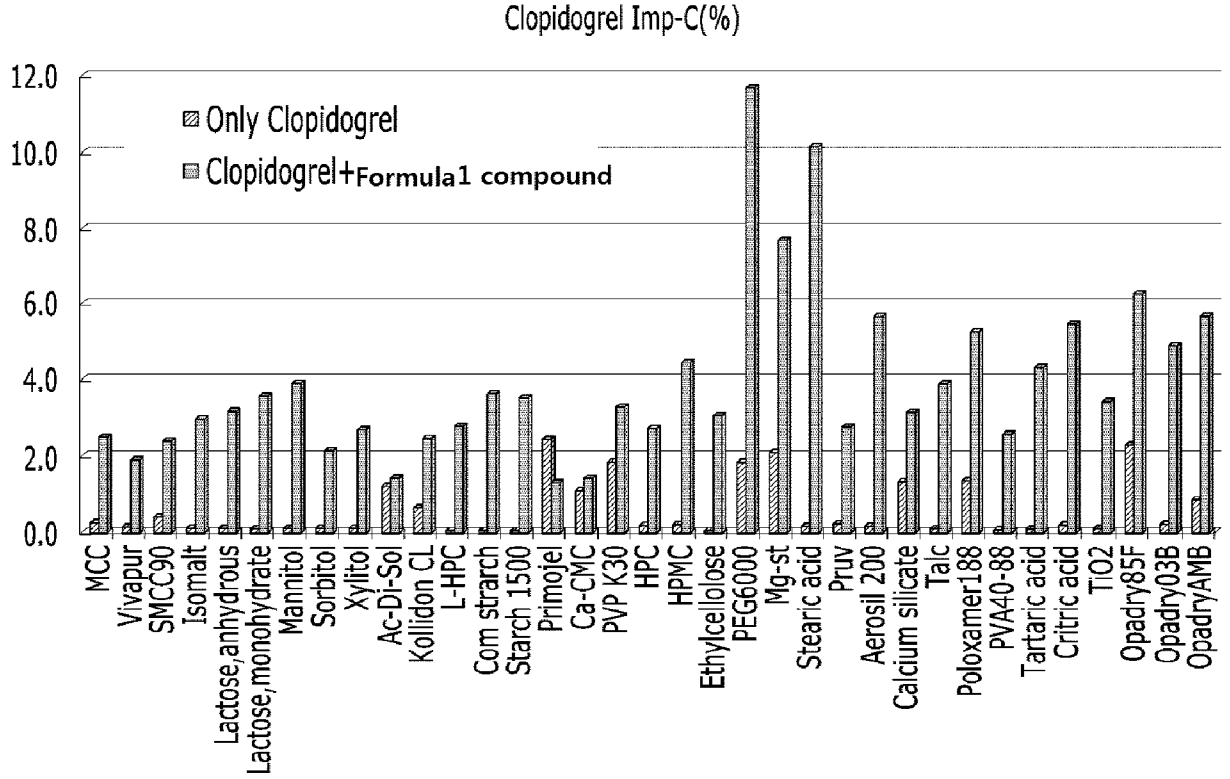
[Fig. 2]


MPB-Clopidogrel Dog O~L
Plasma conc (ng/ml)
180
160
140
120
100
80
60
40
20
0
0
5
10
15
20
25
Time (hr)
MPB-CLO Day14
MPB-CLO Day14 Error
MPB-CLO Day5
MPB-CLO Day5 Error
MPB-CLO Day8
MPB-CLO Day8 Error

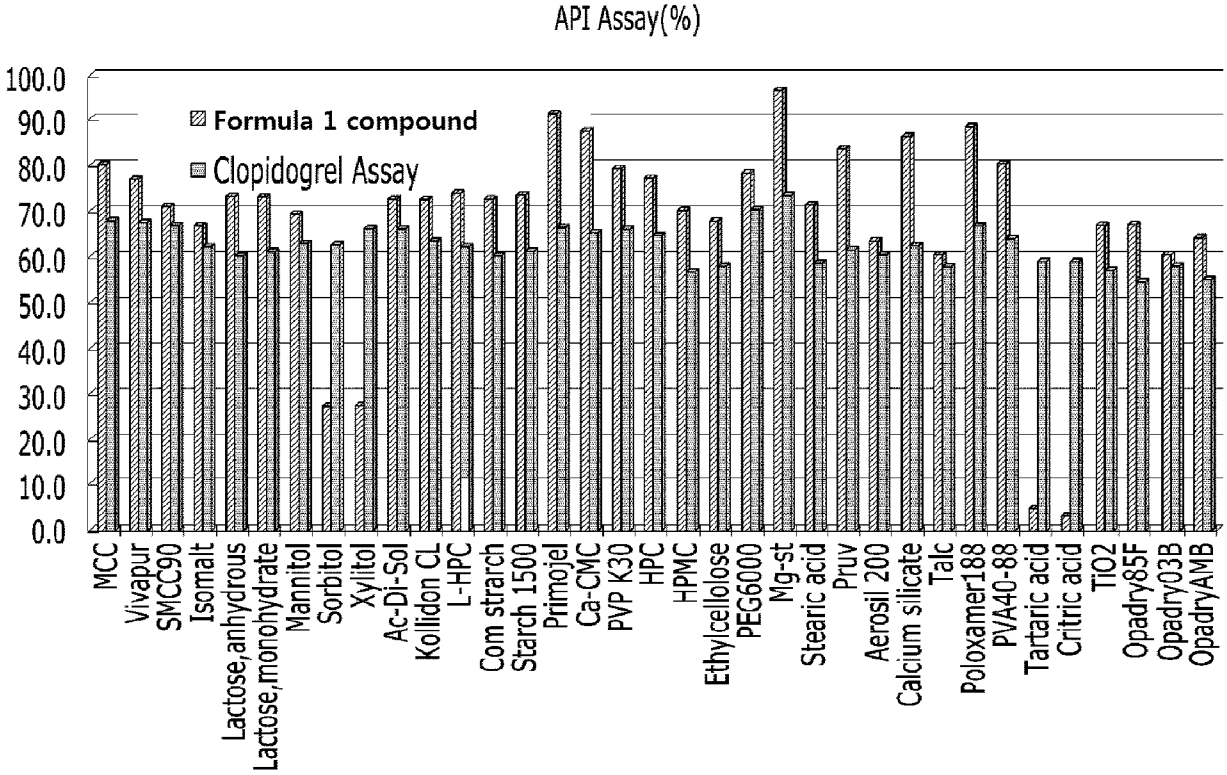
[Fig. 3]


Clopidogrel Imp-A(%)
Only Clopidogrel
Clopidogrel+ Formula 1 compound
20.0
18.0
16.0
14.0
12.0
10.0
8.0
6.0
4.0
2.0
0.0
MCC
Vivapur
SMCC90
Isomalt
Lactose,anhydrous
Lactose,monohydrate
Mannitol
Sorbitol
Xylitol
Ac-Di-Sol
Kollidon CL
L-HPC
Com strarch
Starch 1500
Primojel
Ca-CMC
PVP K30
HPC
HPMC
Ethylcellolose
PEG6000
Mg-st
Stearic acid
Pruv
Aerosil 200
Calcium silicate
Talc
Poloxamer188
PVA40-88
Tartaric acid
Critric acid
TiO2
Opadry85F
Opadry03B
OpadryAMB

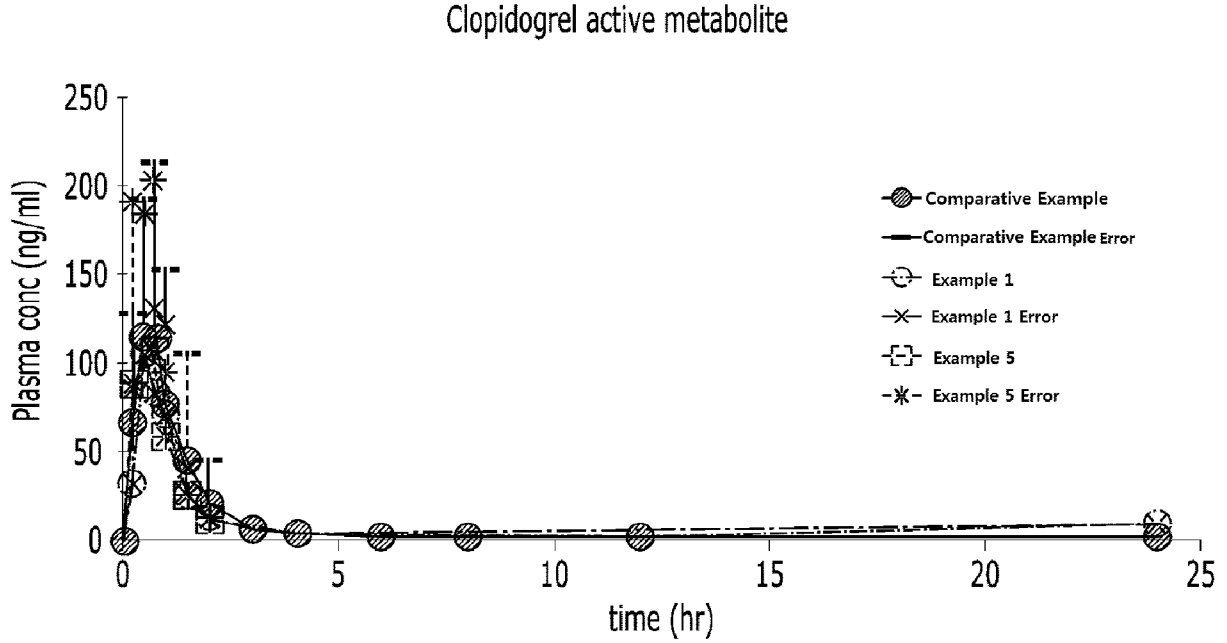
[Fig. 4]


Clopidogrel Imp-C(%)
Only Clopidogrel
Clopidogrel+Formula1 compound
12.0
10.0
8.0
6.0
4.0
2.0
0.0
MCC
Vivapur
SMCC90
Isomalt
Lactose,anhydrous
Lactose,monohydrate
Mannitol
Sorbitol
Xylitol
Ac-Di-Sol
Kollidon CL
L-HPC
Com strarch
Starch 1500
Primojel
Ca-CMC
PVP K30
HPC
HPMC
Ethylcellolose
PEG6000
Mg-st
Stearic acid
Pruv
Aerosil 200
Calcium silicate
Talc
Poloxamer188
PVA40-88
Tartaric acid
Critric acid
TiO2
Opadry85F
Opadry03B
OpadryAMB

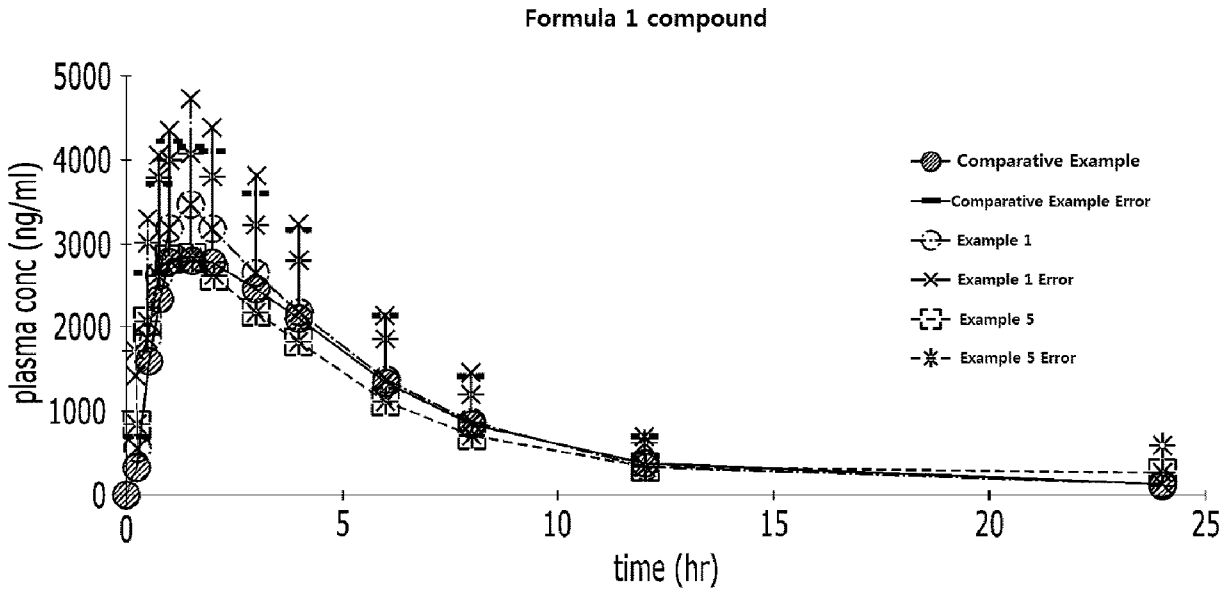
[Fig. 5]


API Assay(%)
Formula 1 compound
Clopidogrel Assay
100.0
90.0
80.0
70.0
60.0
50.0
40.0
30.0
20.0
10.0
0.0
MCC
Vivapur
SMCC90
Isomalt
Lactose,anhydrous
Lactose,monohydrate
Mannitol
Sorbitol
Xylitol
Ac-Di-Sol
Kollidon CL
L-HPC
Com strarch
Starch 1500
Primojel
Ca-CMC
PVP K30
HPC
HPMC
Ethylcellolose
PEG6000
Mg-st
Stearic acid
Pruv
Aerosil 200
Calcium silicate
Talc
Poloxamer188
PVA40-88
Tartaric acid
Critric acid
TiO2
Opadry85F
Opadry03B
OpadryAMB

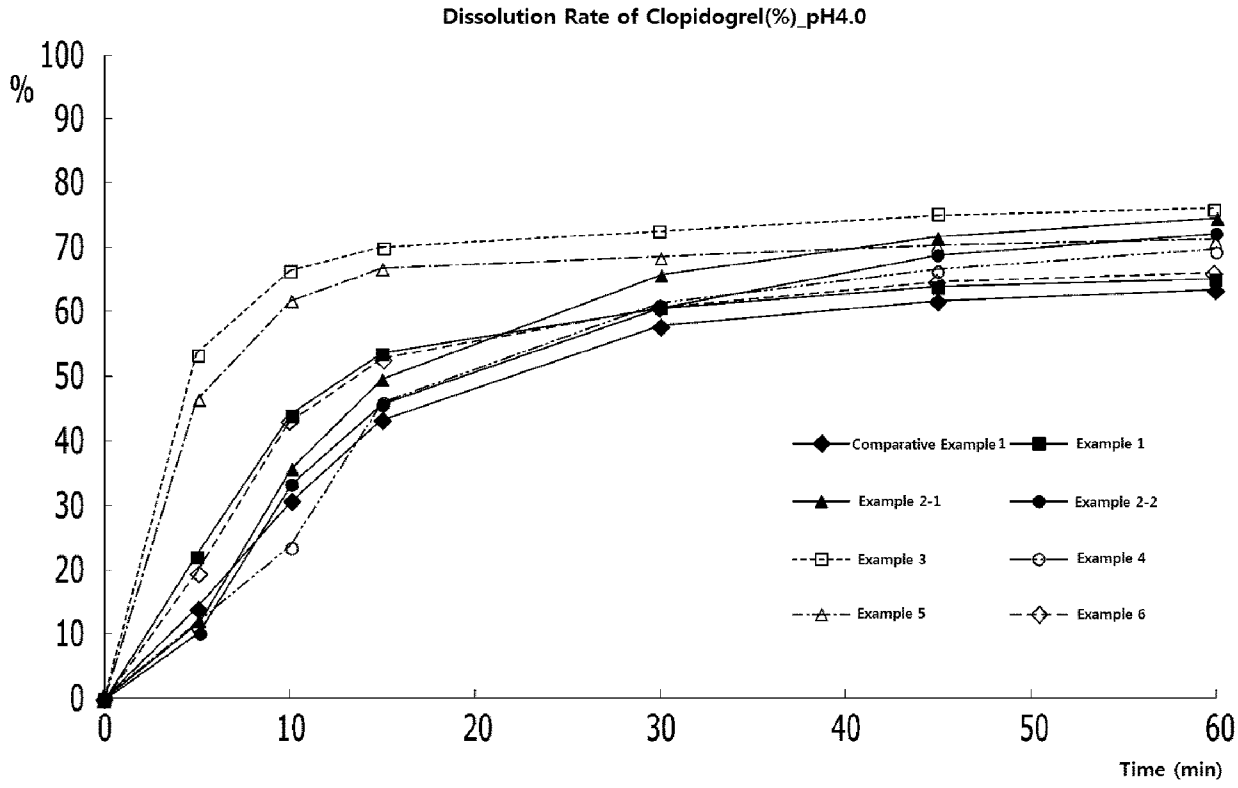
[Fig. 6]


Clopidogrel active metabolite
Plasma conc (ng/ml)
250
200
150
100
50
0
0
5
10
15
20
25
time (hr)
Comparative Example
Comparative Example Error
Example 1
Example 1 Error
Example 5
Example 5 Error

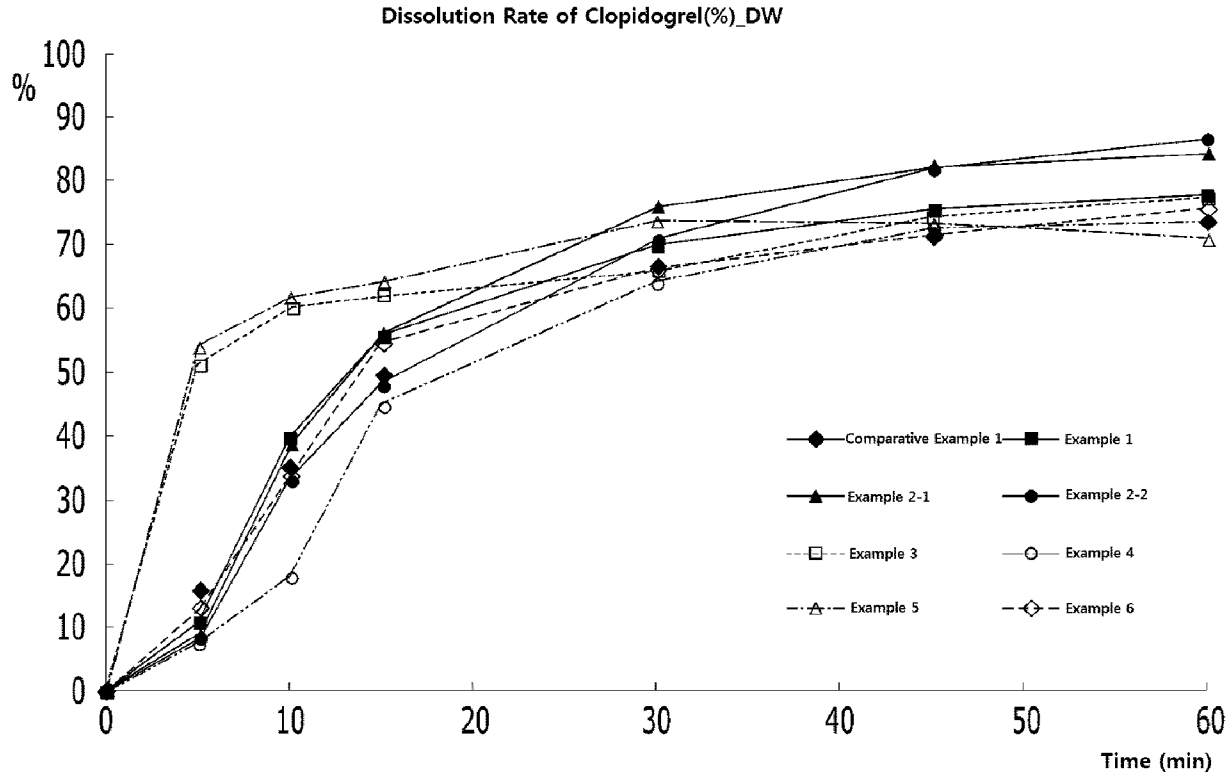
[Fig. 7]


Formula 1 compound
plasma conc (ng/ml)
5000
4000
3000
2000
1000
0
0
5
10
15
20
25
time (hr)
Comparative Example
Comparative Example Error
Example 1
Example 1 Error
Example 5
Example 5 Error

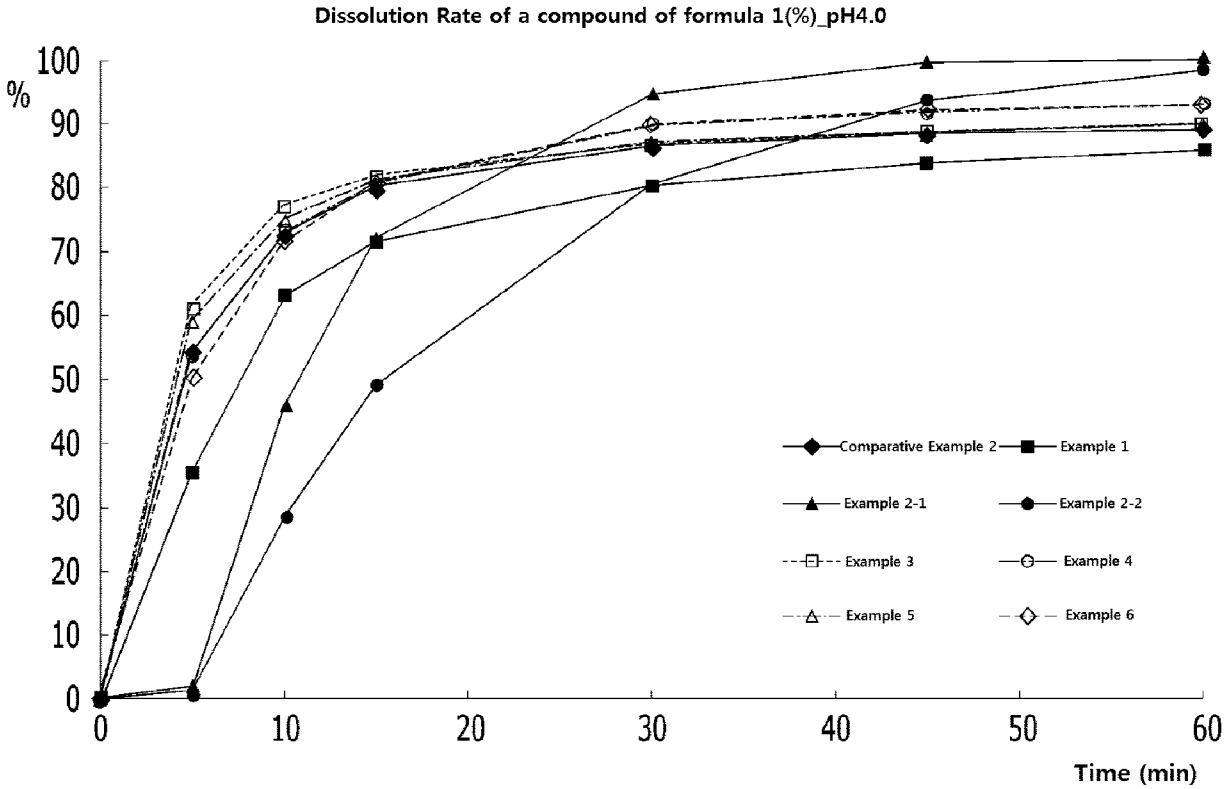
[Fig. 8]


Dissolution Rate of Clopidogrel(%)_pH4.0
%
100
90
80
70
60
50
40
30
20
10
0
0
10
20
30
40
50
60
Time (min)
Comparative Example 1
Example 1
Example 2-1
Example 2-2
Example 3
Example 4
Example 5
Example 6

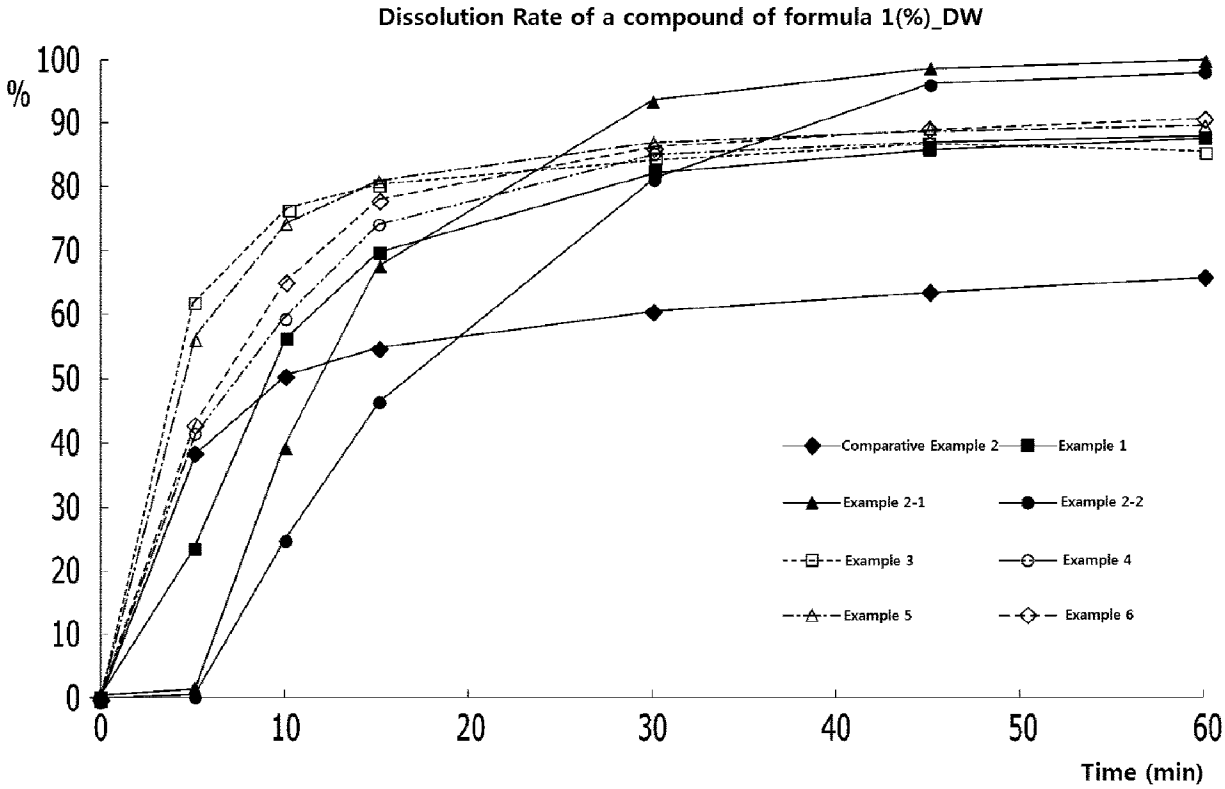
[Fig. 9]


Dissolution Rate of Clopidogrel(%)_DW
%
100
90
80
70
60
50
40
30
20
10
0
0
10
20
30
40
50
60
Time (min)
Comparative Example 1
Example 1
Example 2-1
Example 2-2
Example 3
Example 4
Example 5
Example 6

[Fig. 10]


Dissolution Rate of a compound of formula 1(%)_pH4.0
%
100
90
80
70
60
50
40
30
20
10
0
0
10
20
30
40
50
60
Time (min)
Comparative Example 2
Example 1
Example 2-1
Example 2-2
Example 3
Example 4
Example 5
Example 6

[Fig. 11]


Dissolution Rate of a compound of formula 1(%)_DW
%
100
90
80
70
60
50
40
30
20
10
0
0
10
20
30
40
50
60
Time (min)
Comparative Example 2
Example 1
Example 2-1
Example 2-2
Example 3
Example 4
Example 5
Example 6