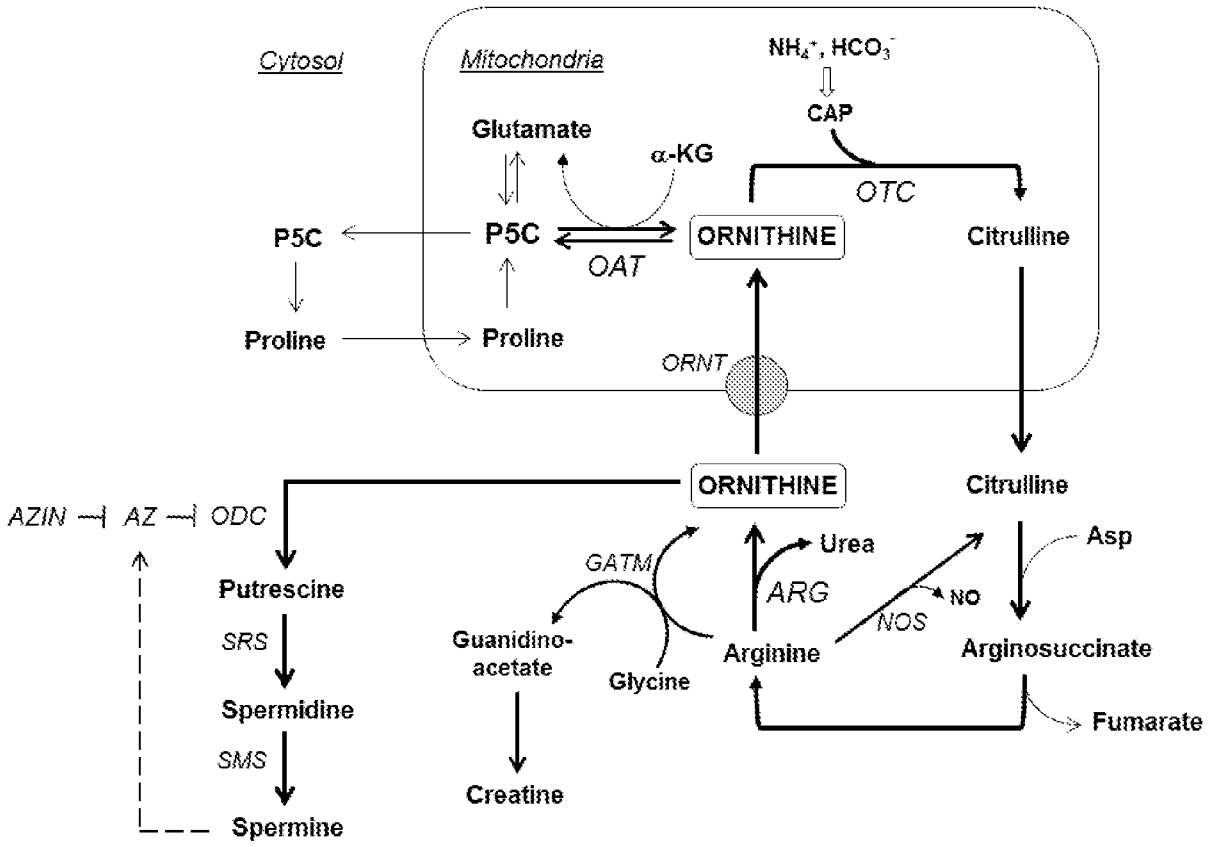

Cytosol
Mitochondria
NH_4^+, HCO_3^-
CAP
Glutamate
α-KG
OTC
P5C
P5C
OAT
ORNITHINE
Citrulline
P5C
Proline
Proline
ORNT
ORNITHINE
Citrulline
AZIN
AZ
ODC
Urea
GATM
ARG
NO
NOS
Asp
Putrescine
SRS
Guanidino-
acetate
Glycine
Arginine
Arginosuccinate
Spermidine
SMS
Fumarate
Creatine
Spermine

Figure 1

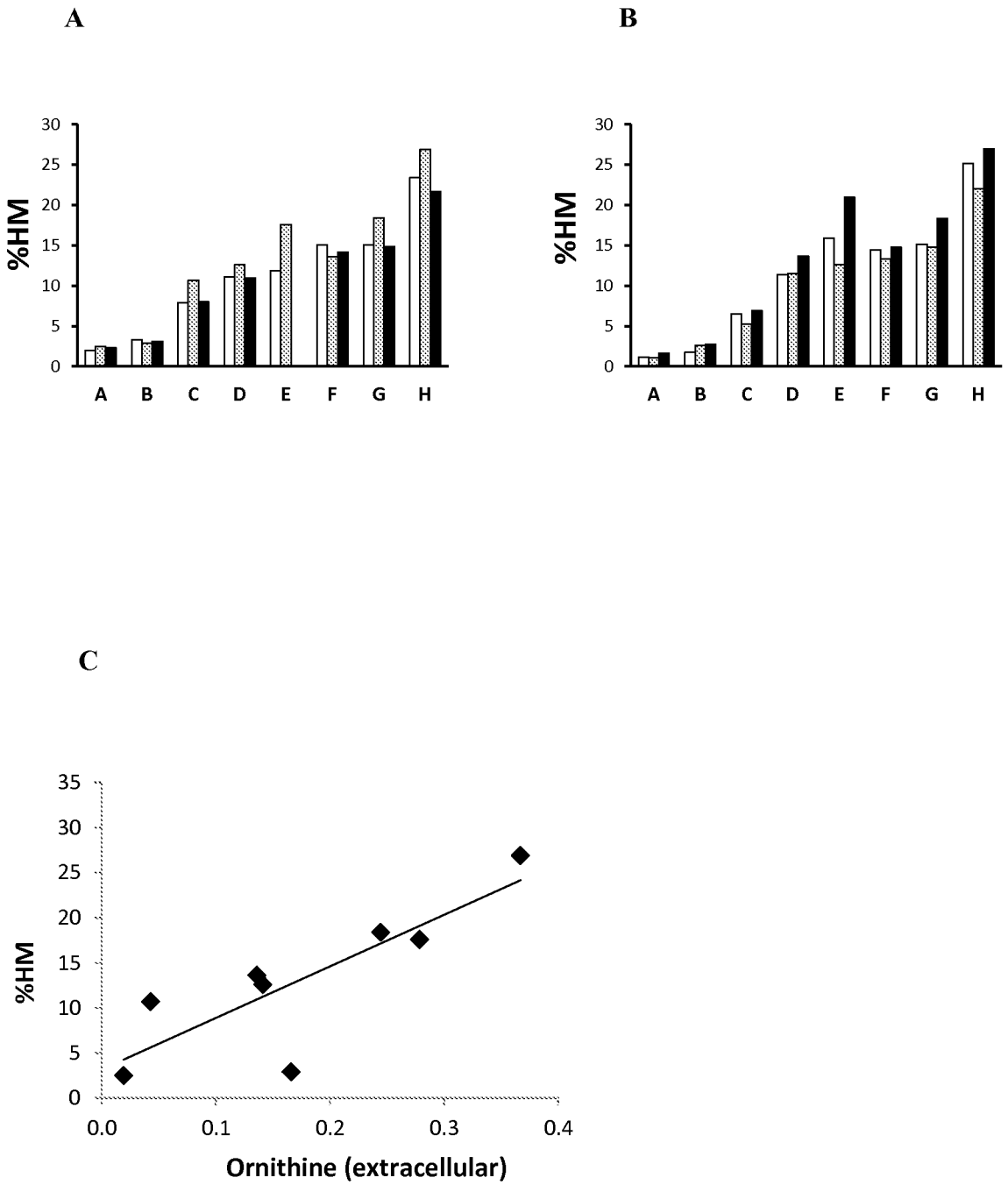

A
B
%HM
30
25
20
15
10
5
0
A B C D E F G H
C
%HM
35
30
25
20
15
10
5
0
0.0 0.1 0.2 0.3 0.4
Ornithine (extracellular)

Figure 2

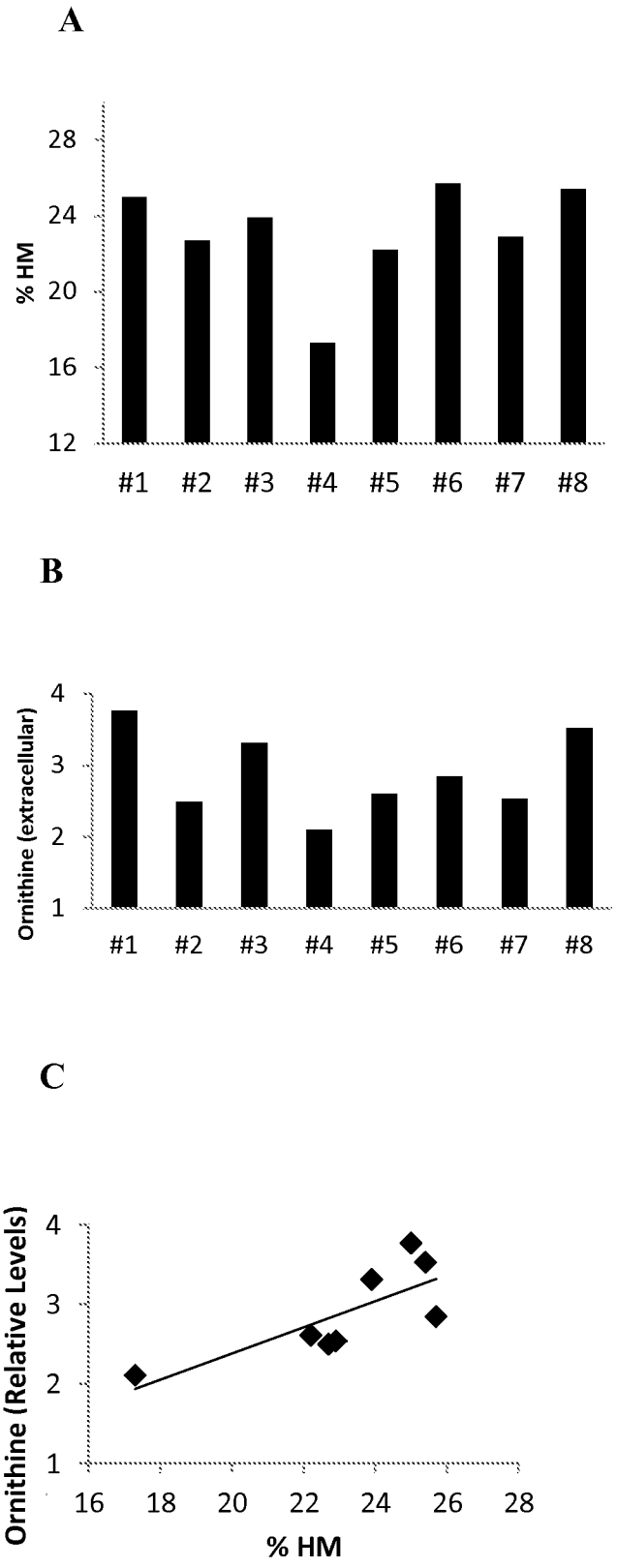

A
28
24
20
16
12
% HM
#1 #2 #3 #4 #5 #6 #7 #8
B
4
3
2
1
Ornithine (extracellular)
#1 #2 #3 #4 #5 #6 #7 #8
C
4
3
2
1
Ornithine (Relative Levels)
16 18 20 22 24 26 28
% HM

Figure 3

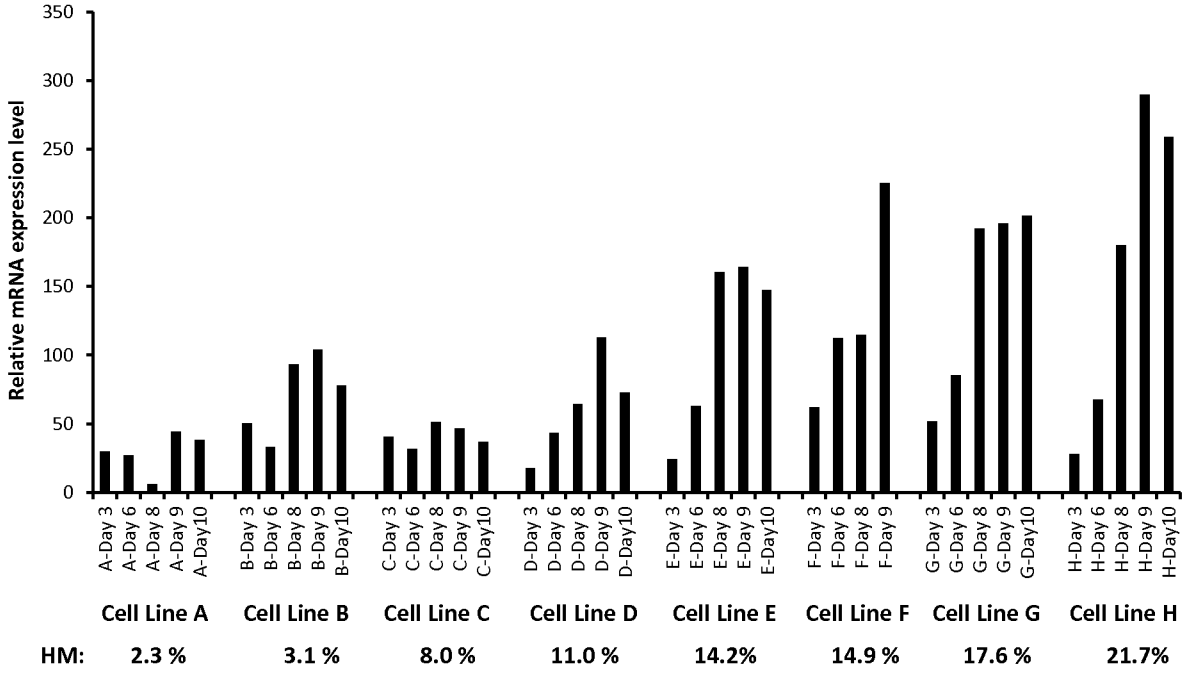

Relative mRNA expression level
350
300
250
200
150
100
50
0
A-Day 3
A-Day 6
A-Day 8
A-Day 9
A-Day10
B-Day 3
B-Day 6
B-Day 8
B-Day 9
B-Day10
C-Day 3
C-Day 6
C-Day 8
C-Day 9
C-Day10
D-Day 3
D-Day 6
D-Day 8
D-Day 9
D-Day10
E-Day 3
E-Day 6
E-Day 8
E-Day 9
E-Day10
F-Day 3
F-Day 6
F-Day 8
F-Day 9
G-Day 3
G-Day 6
G-Day 8
G-Day 9
G-Day10
H-Day 3
H-Day 6
H-Day 8
H-Day 9
H-Day10
Cell Line A
Cell Line B
Cell Line C
Cell Line D
Cell Line E
Cell Line F
Cell Line G
Cell Line H
HM:
2.3 %
3.1 %
8.0 %
11.0 %
14.2%
14.9 %
17.6 %
21.7%

Figure 4

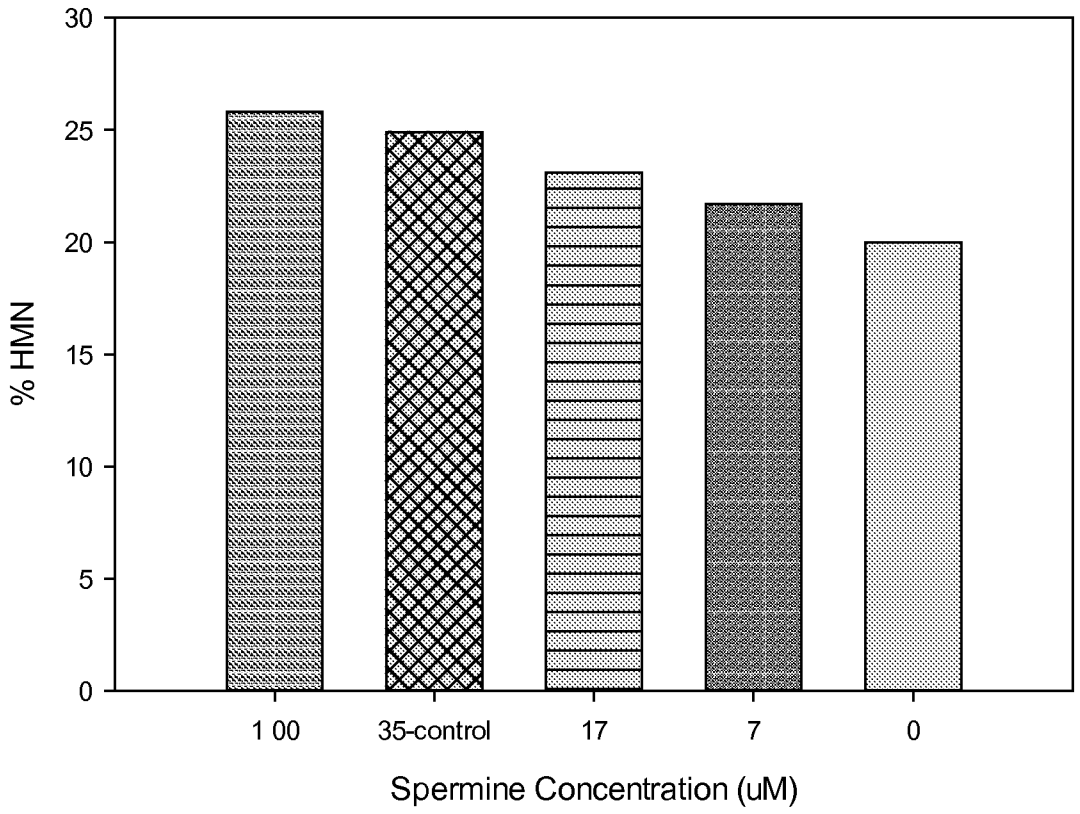

30
25
20
15
10
5
0
% HMN
1 00
35-control
17
7
0
Spermine Concentration (uM)

Figure 5

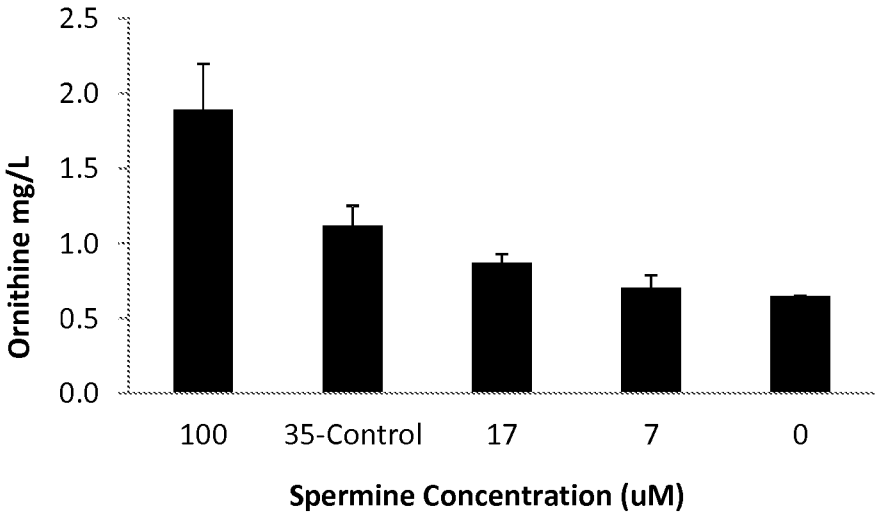

2.5
2.0
1.5
1.0
0.5
0.0
Ornithine mg/L
100
35-Control
17
7
0
Spermine Concentration (uM)

Figure 6

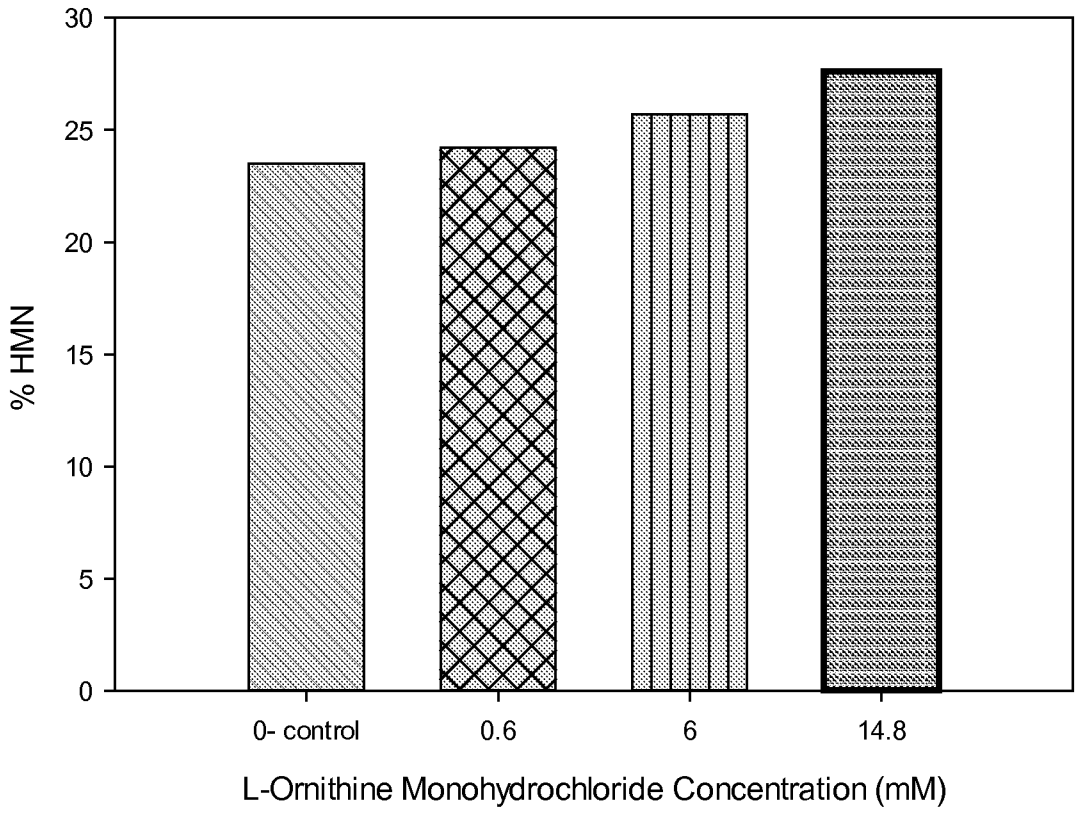

30
25
20
15
10
5
0
% HMN
0- control
0.6
6
14.8
L-Ornithine Monohydrochloride Concentration (mM)

Figure 7

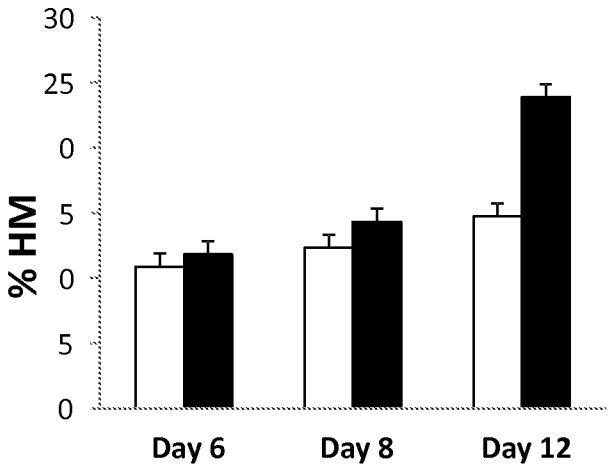


Figure 8

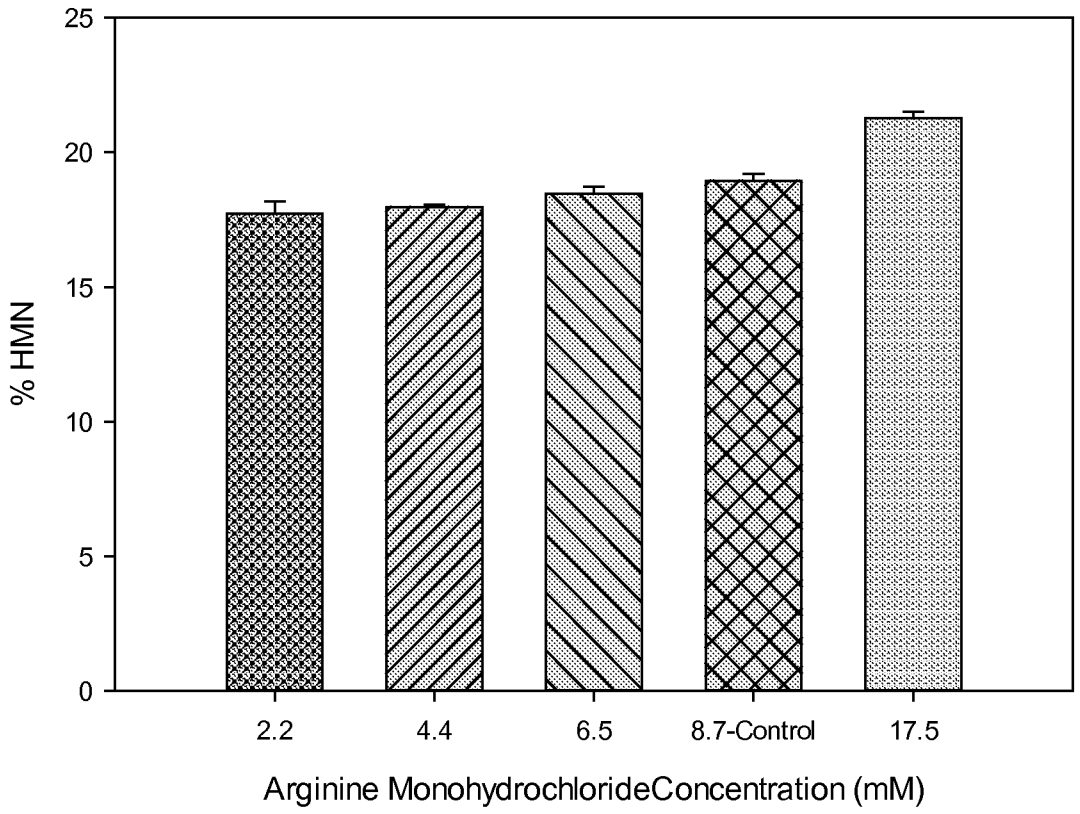

25
20
15
10
5
0
% HMN
2.2
4.4
6.5
8.7-Control
17.5
Arginine MonohydrochlorideConcentration (mM)

Figure 9

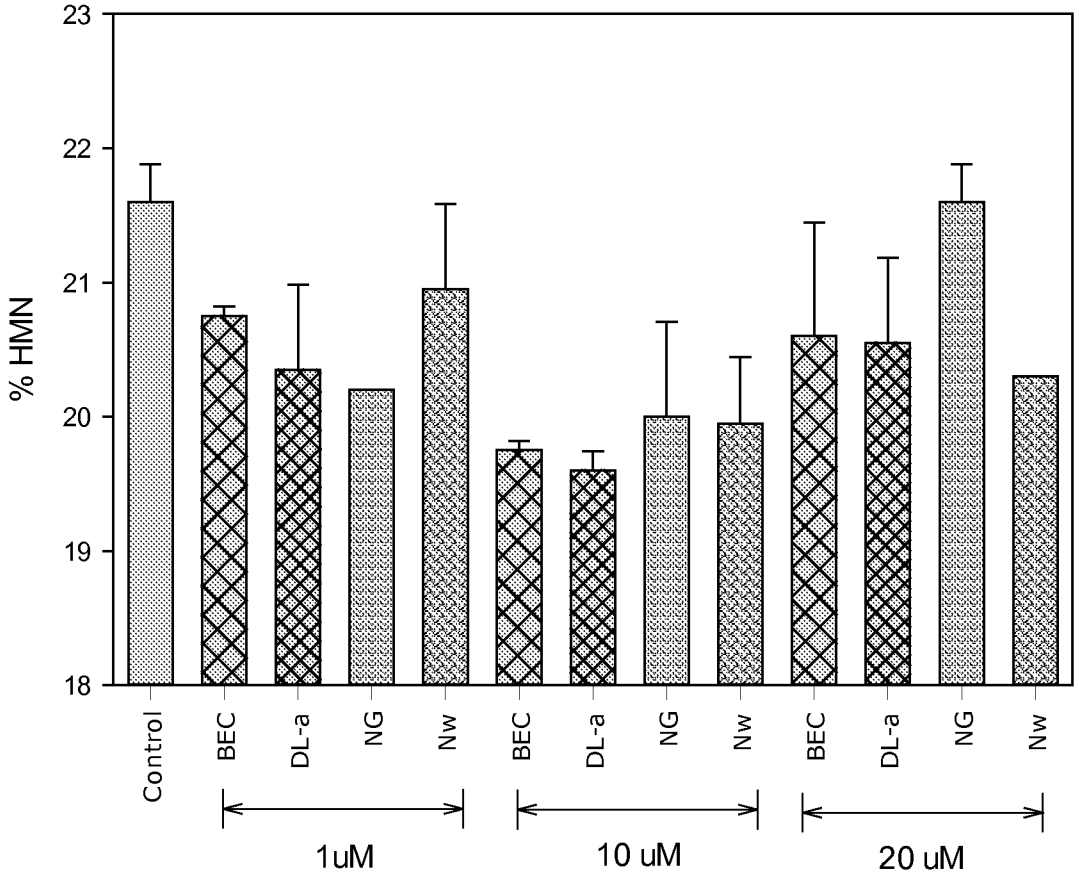

23
22
21
20
19
18
% HMN
Control
BEC
DL-a
NG
Nw
BEC
DL-a
NG
Nw
BEC
DL-a
NG
Nw
1uM
10 uM
20 uM

Figure 10

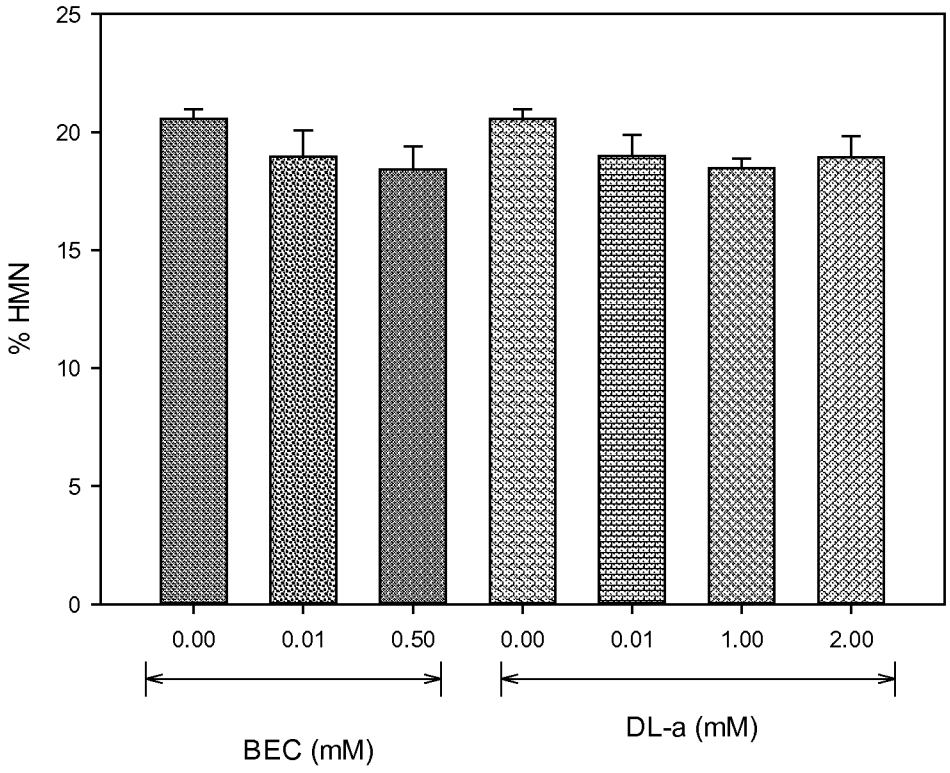


Figure 11