FIG. 1A

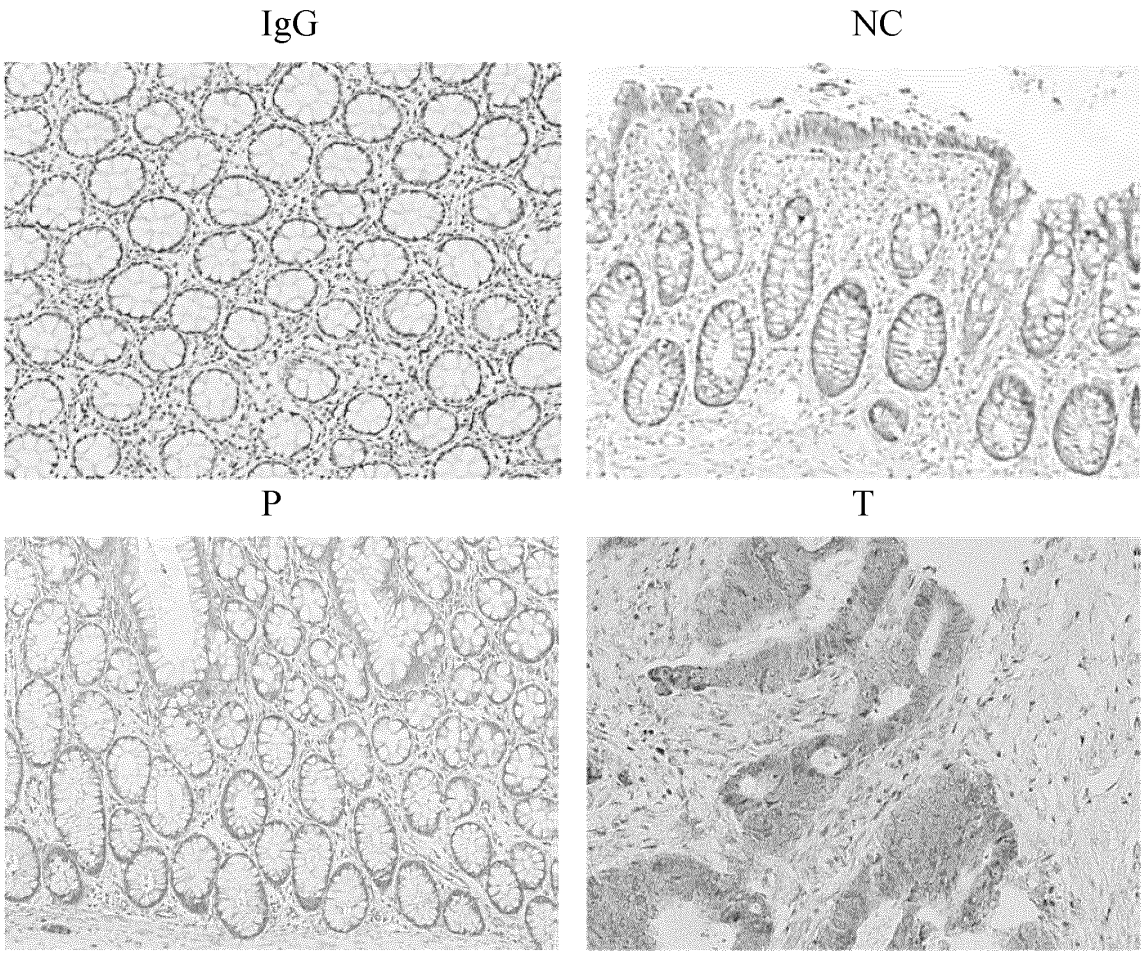


FIG. 1B

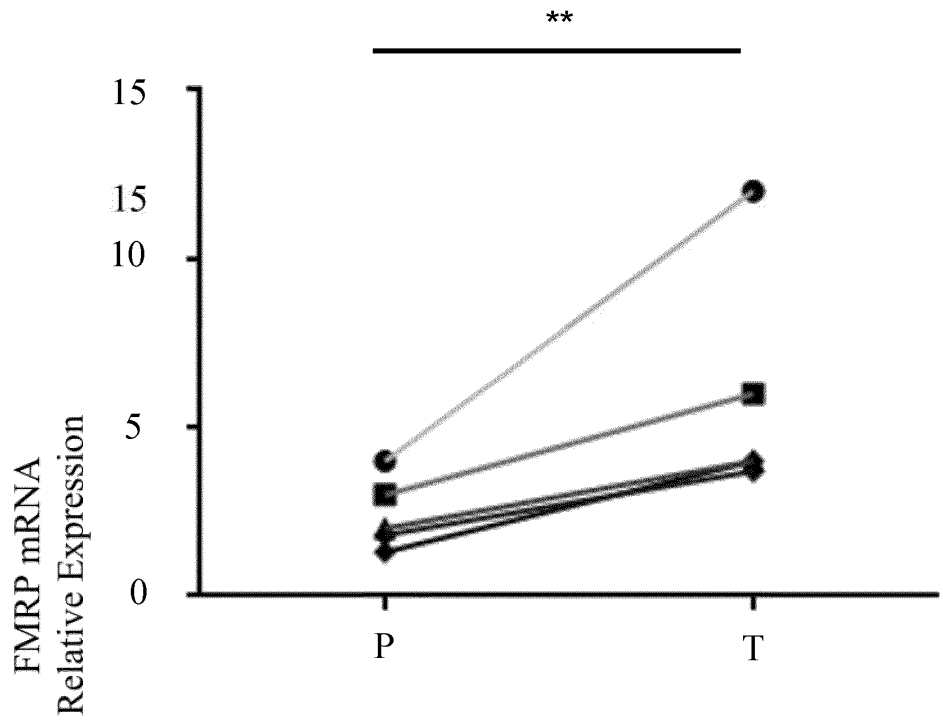


FIG. 1C

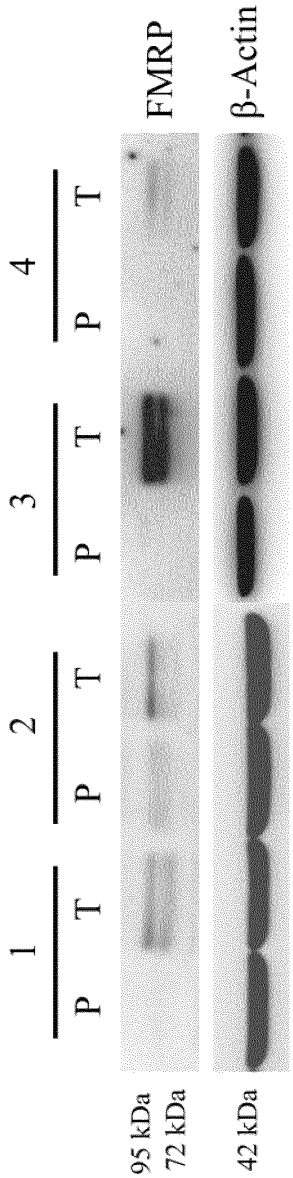


FIG. 1D

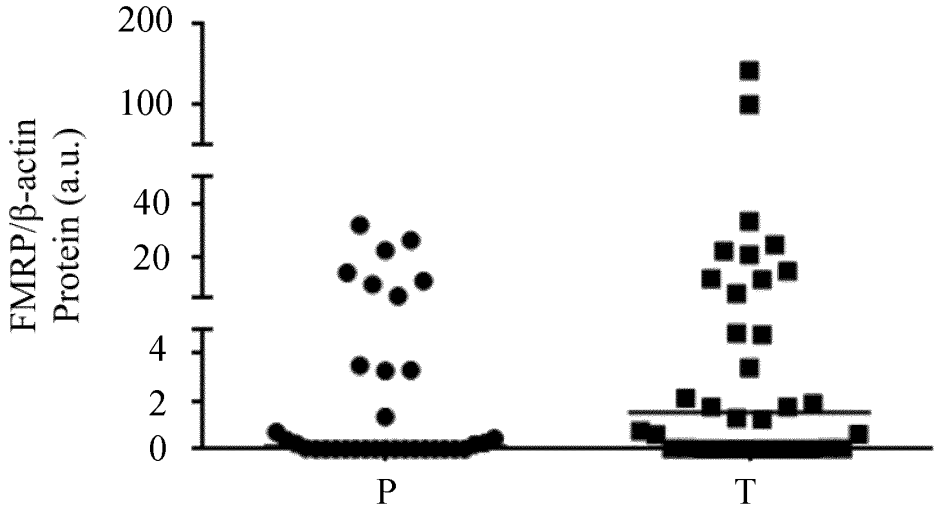


FIG. 2A

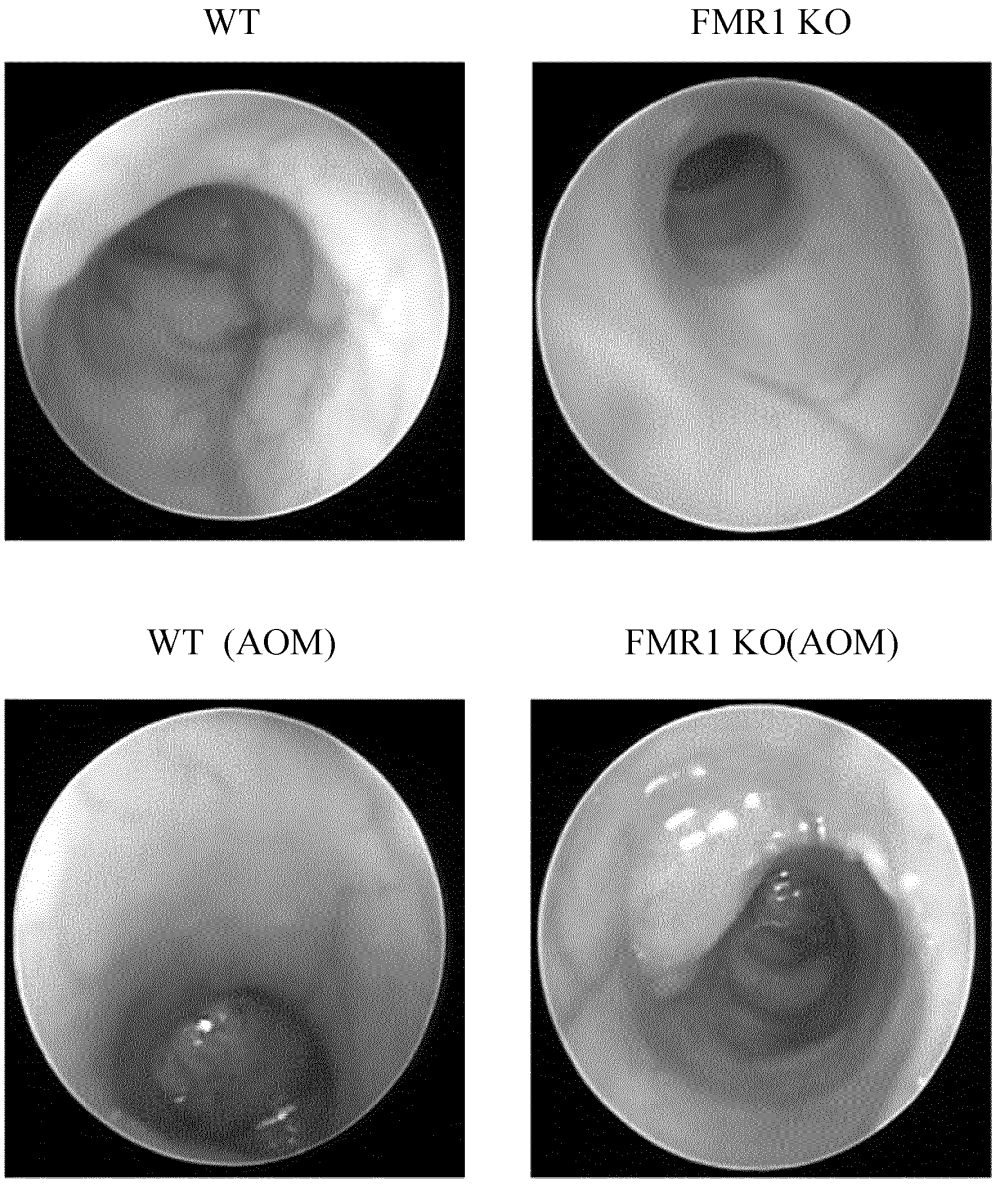


FIG. 2B

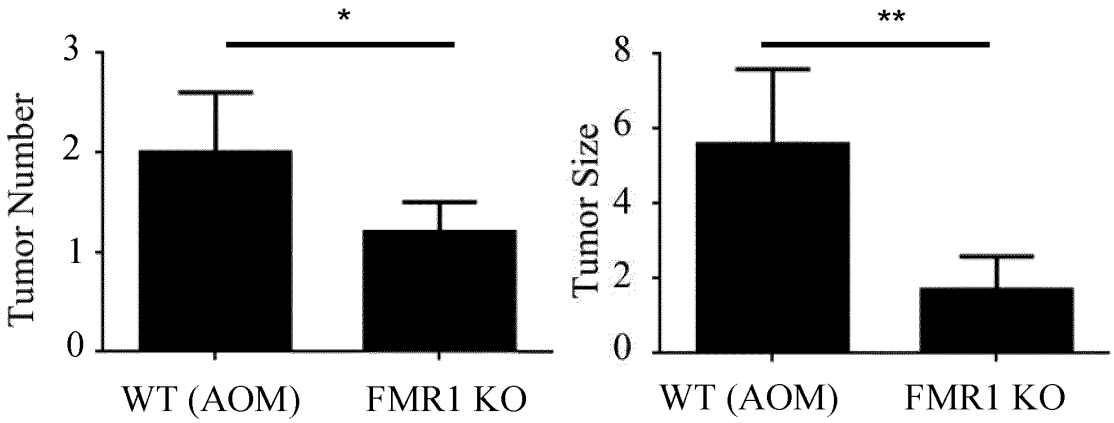

*
**
Tumor Number
Tumor Size
0
1
2
3
0
2
4
6
8
WT (AOM)
FMR1 KO
WT (AOM)
FMR1 KO

FIG. 2C

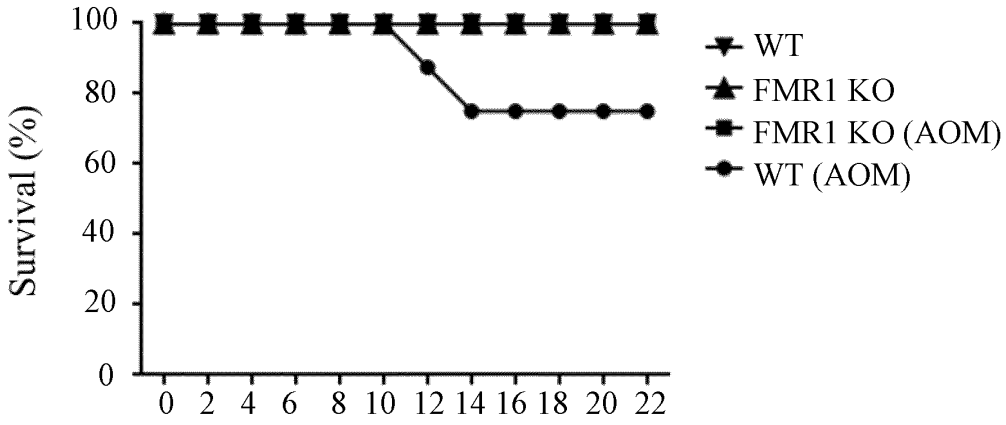

Survival (%)
0
20
40
60
80
100
0 2 4 6 8 10 12 14 16 18 20 22
WT
FMR1 KO
FMR1 KO (AOM)
WT (AOM)

FIG. 2D

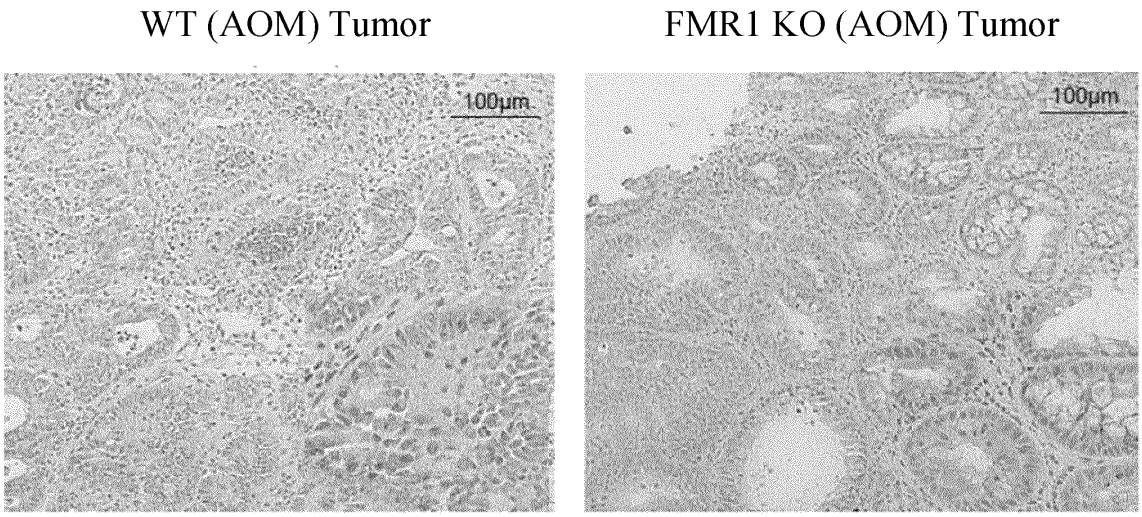

WT (AOM) Tumor
FMR1 KO (AOM) Tumor
100µm
100µm

FIG. 2E

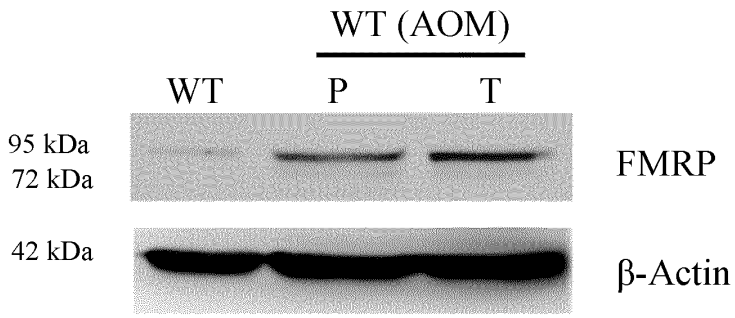

WT (AOM)
WT
P
T
95 kDa
72 kDa
FMRP
42 kDa
β-Actin

FIG. 2F

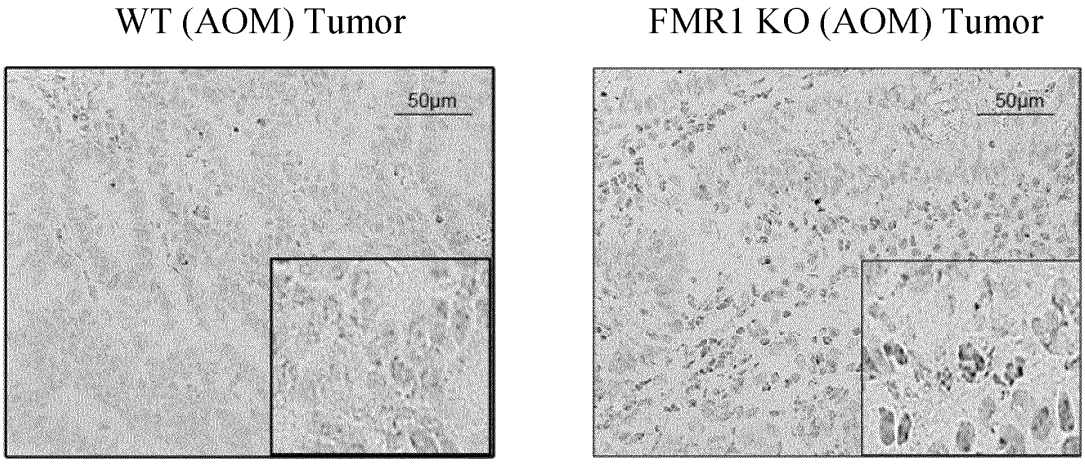

WT (AOM) Tumor
FMR1 KO (AOM) Tumor
50µm
50µm

FIG. 2G

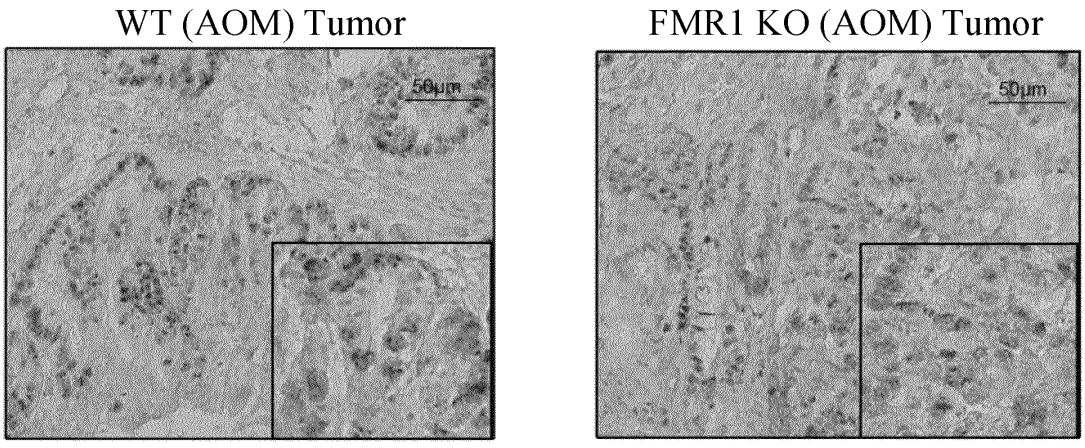

WT (AOM) Tumor
FMR1 KO (AOM) Tumor
50µm
50µm

FIG. 3A

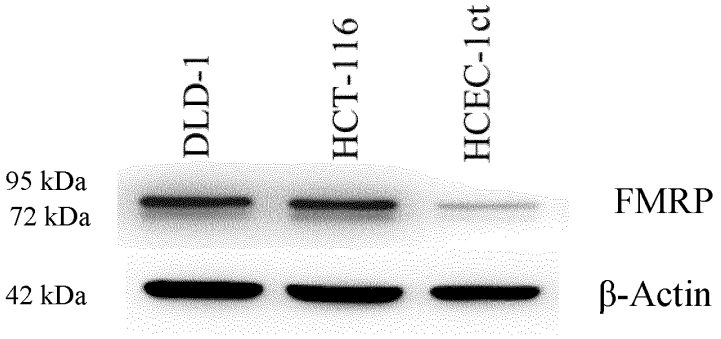

DLD-1
HCT-116
HCEC-1ct
95 kDa
72 kDa
42 kDa
FMRP
β-Actin

FIG. 3B

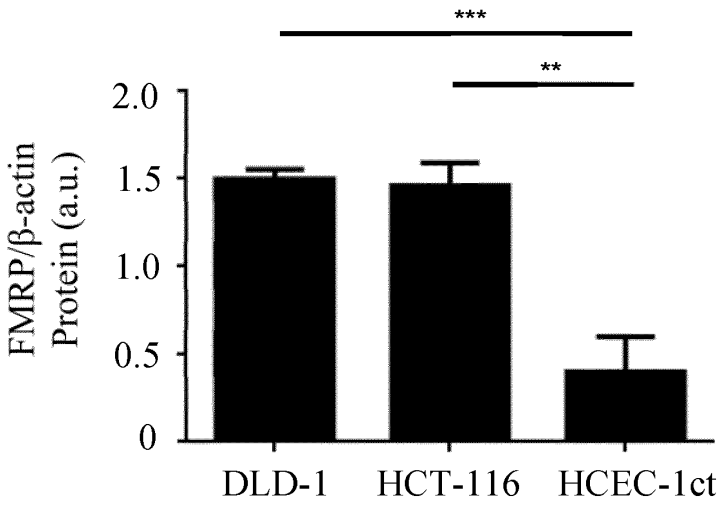

***
**
2.0
1.5
1.0
0.5
0
FMRP/β-actin Protein (a.u.)
DLD-1
HCT-116
HCEC-1ct

FIG. 3C

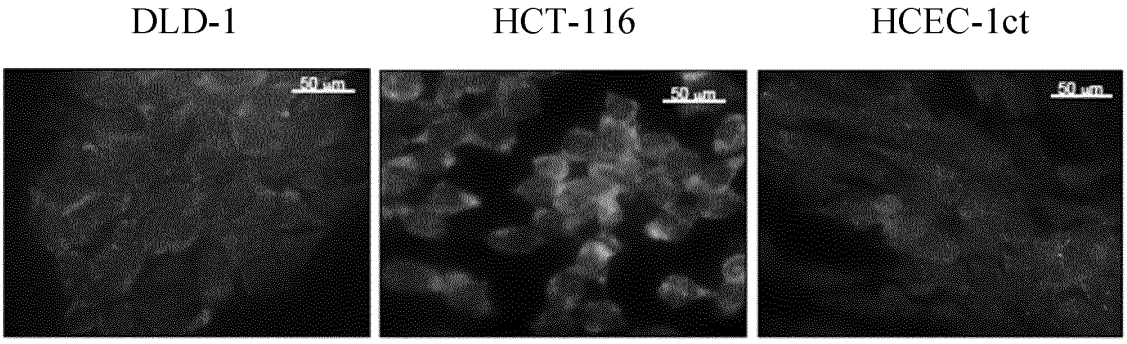
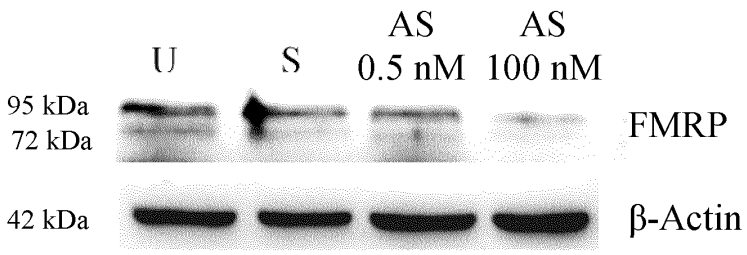


FIG. 3D



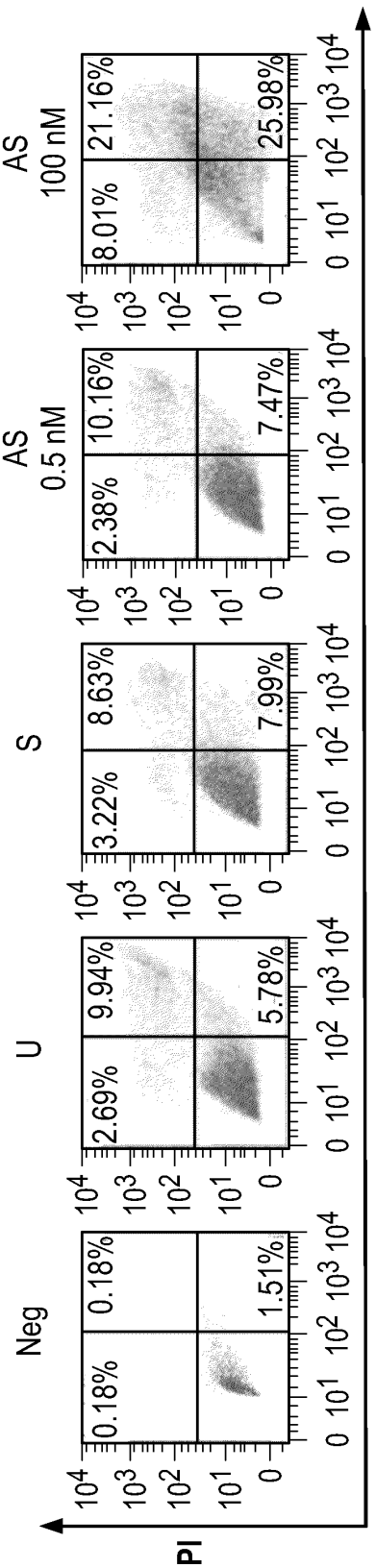

Neg
U
S
AS
0.5 nM
AS
100 nM
PI
AnnV
0.18%
0.18%
1.51%
2.69%
9.94%
5.78%
3.22%
8.63%
7.99%
2.38%
10.16%
7.47%
8.01%
21.16%
25.98%

FIG. 3E

FIG. 3F

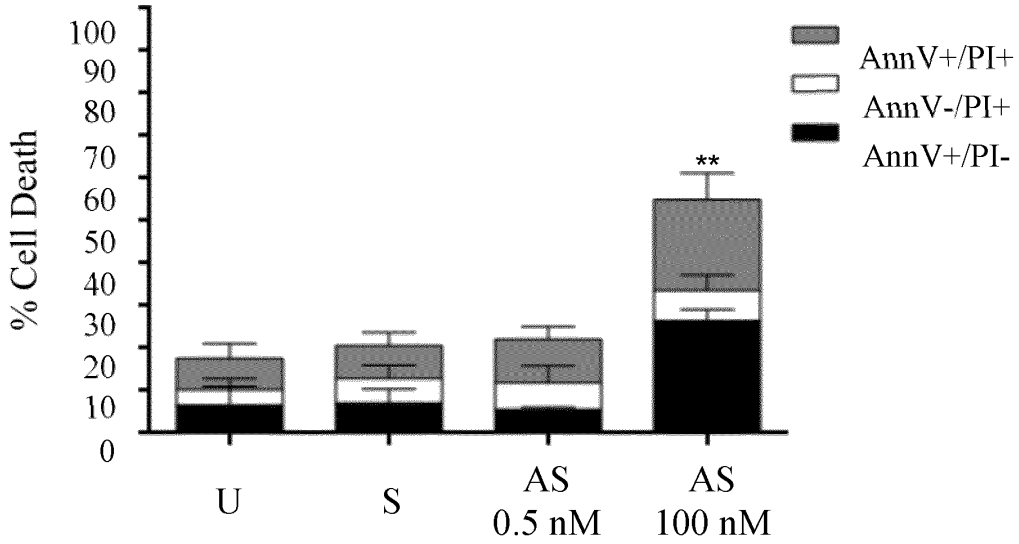
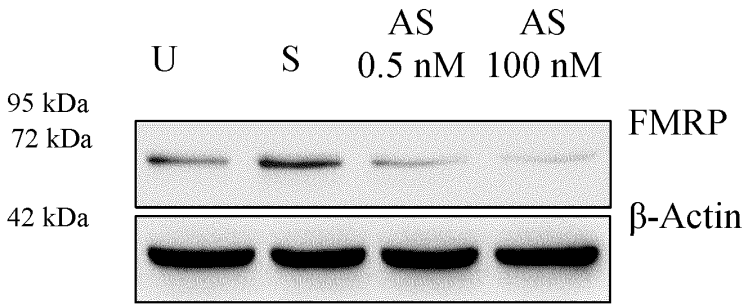

% Cell Death
100
90
80
70
60
50
40
30
20
10
0
**
AnnV+/PI+
AnnV-/PI+
AnnV+/PI-
U
S
AS
0.5 nM
AS
100 nM

FIG. 3G



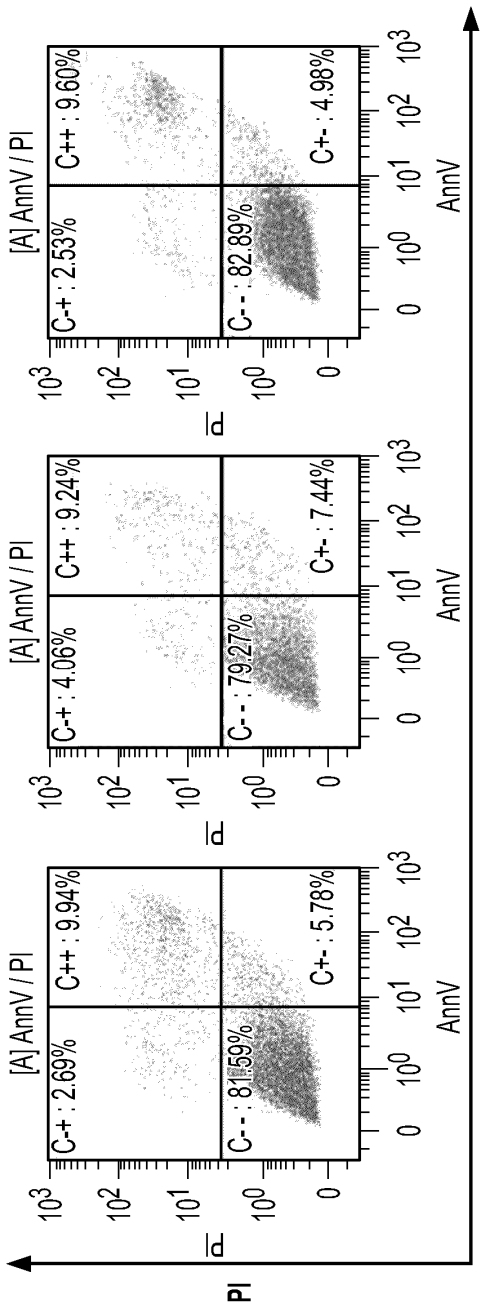
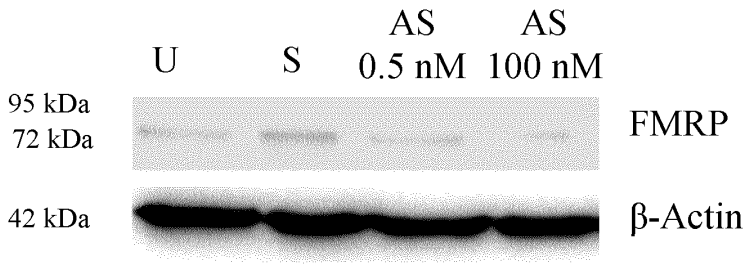

U
S
AS
0.5 nM
[A] AnnV / PI
C-+ : 2.69%
C++ : 9.94%
C- - : 81.59%
C+- : 5.78%
C-+ : 4.06%
C++ : 9.24%
C- - : 79.27%
C+- : 7.44%
C-+ : 2.53%
C++ : 9.60%
C- - : 82.89%
C+- : 4.98%
PI
AnnV
Ann V

FIG. 3H

FIG. 3I



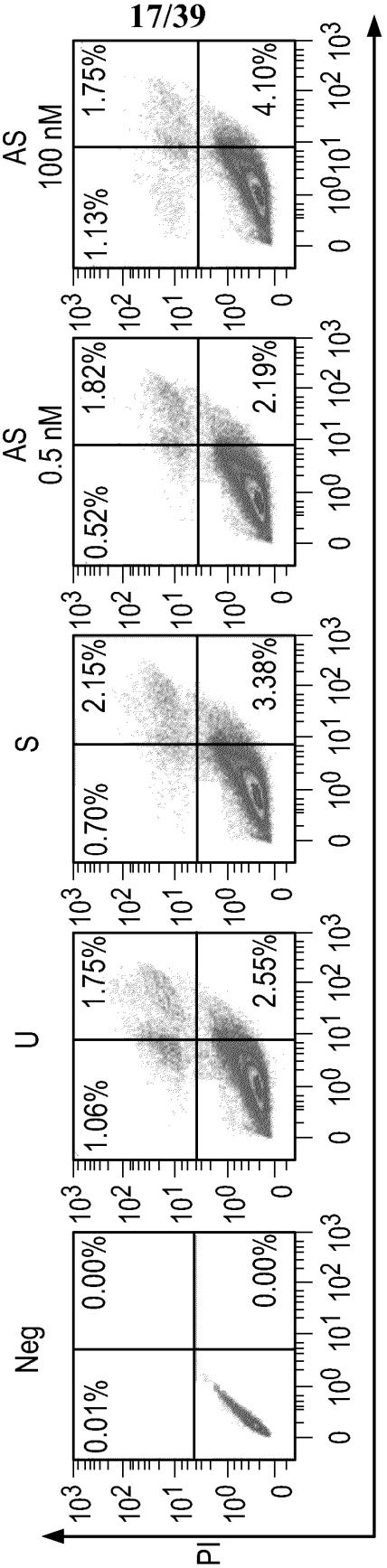
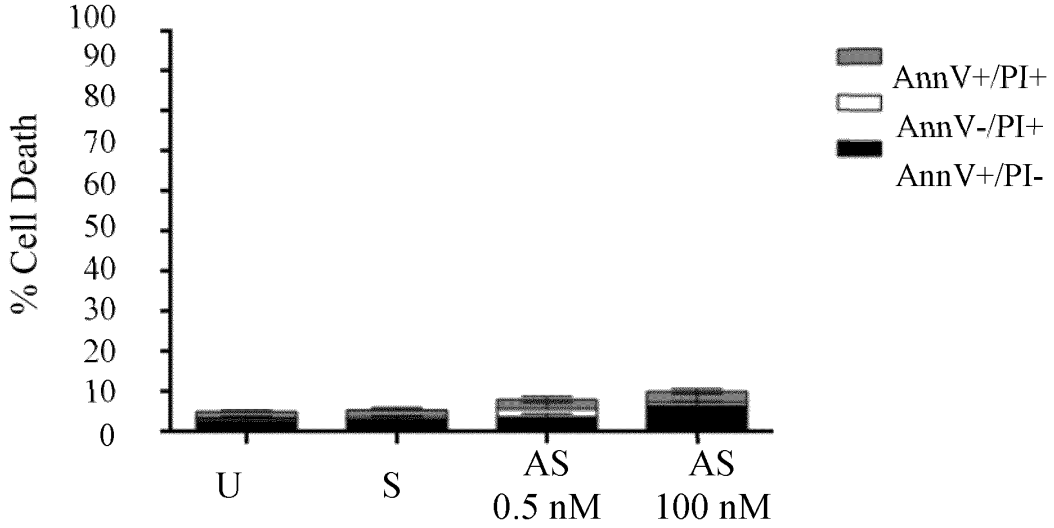

Neg
U
S
AS
0.5 nM
AS
100 nM
PI
Ann V
0.01%
0.00%
0.00%
1.06%
1.75%
2.55%
0.70%
2.15%
3.38%
0.52%
1.82%
2.19%
1.13%
1.75%
4.10%

FIG. 3J

FIG. 3K


100
90
80
70
60
50
40
30
20
10
0
% Cell Death
U
S
AS
0.5 nM
AS
100 nM
AnnV+/PI+
AnnV-/PI+
AnnV+/PI-

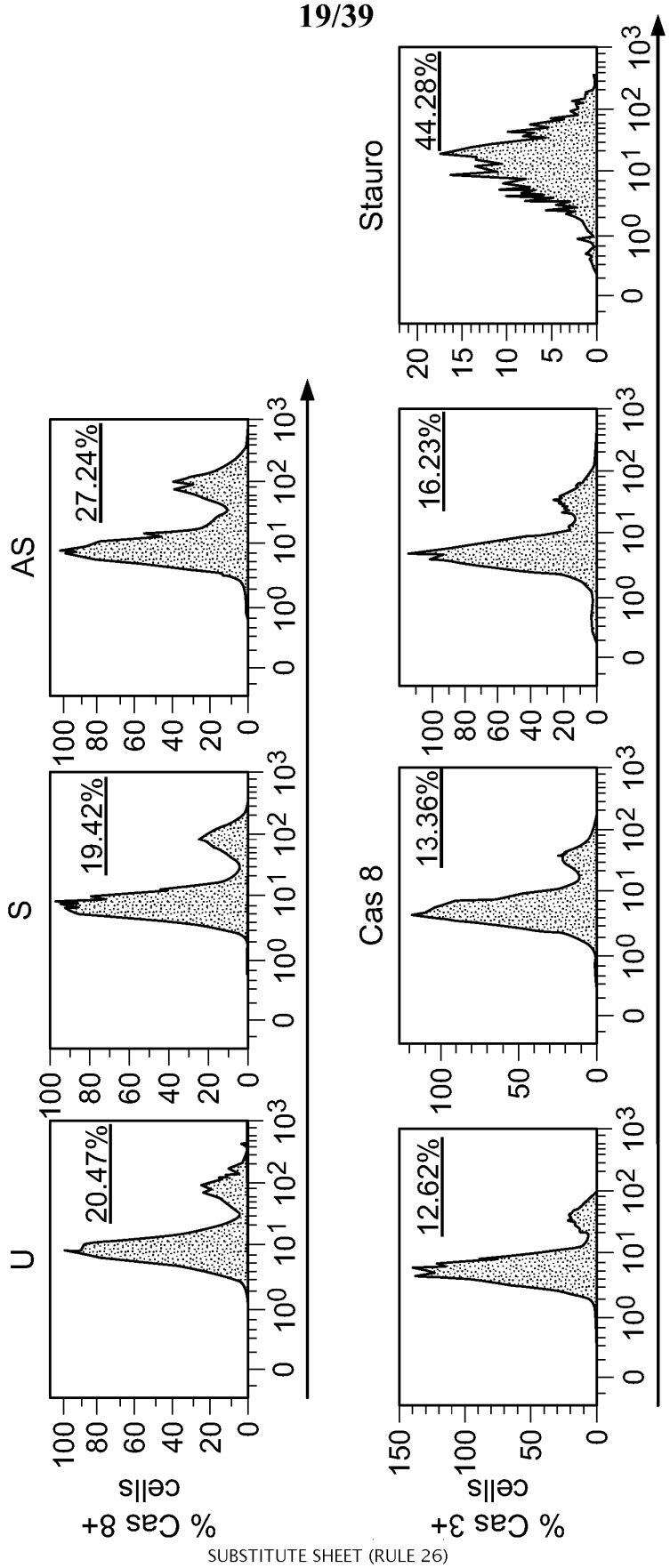
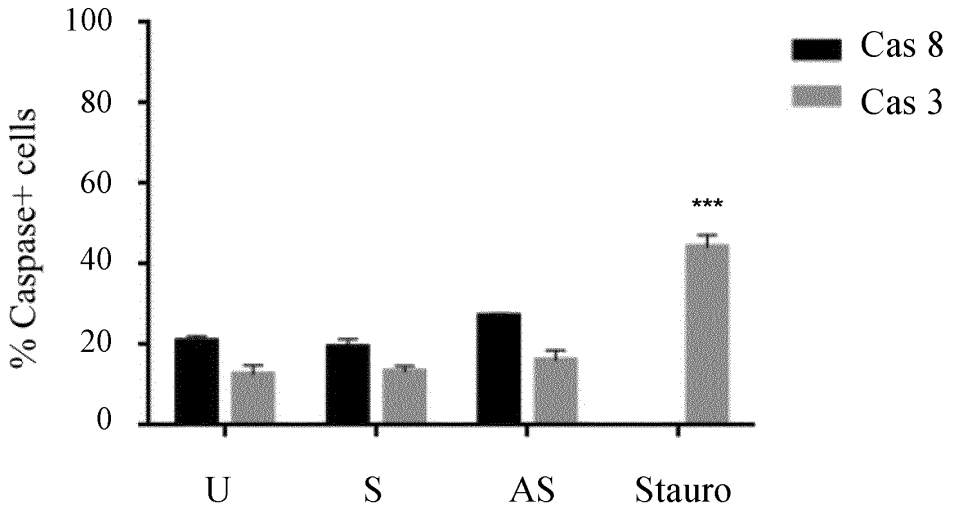

U
S
AS
Stauro
Cas 8
Cas 3
% Cas 8+ cells
% Cas 3+ cells
20.47%
19.42%
27.24%
12.62%
13.36%
16.23%
44.28%

FIG. 4A

FIG. 4B



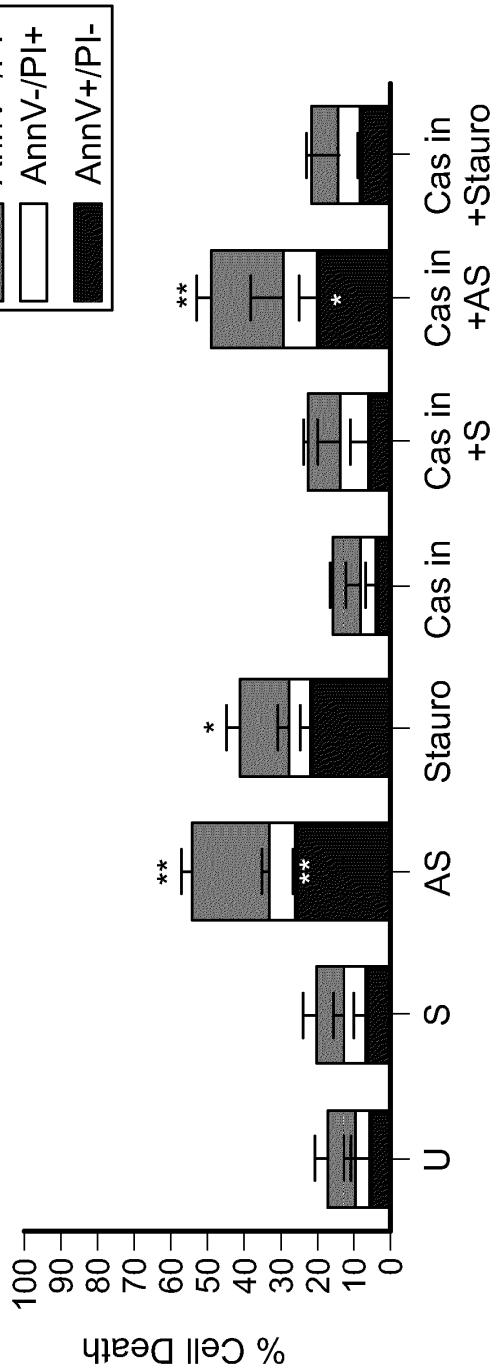

AnnV+/PI+
AnnV-/PI+
AnnV+/PI-
% Cell Death
100
90
80
70
60
50
40
30
20
10
0
U
S
AS
Stauro
Cas in
Cas in +S
Cas in +AS
Cas in +Stauro
**
**
*
**
*

FIG. 4C

FIG. 4D

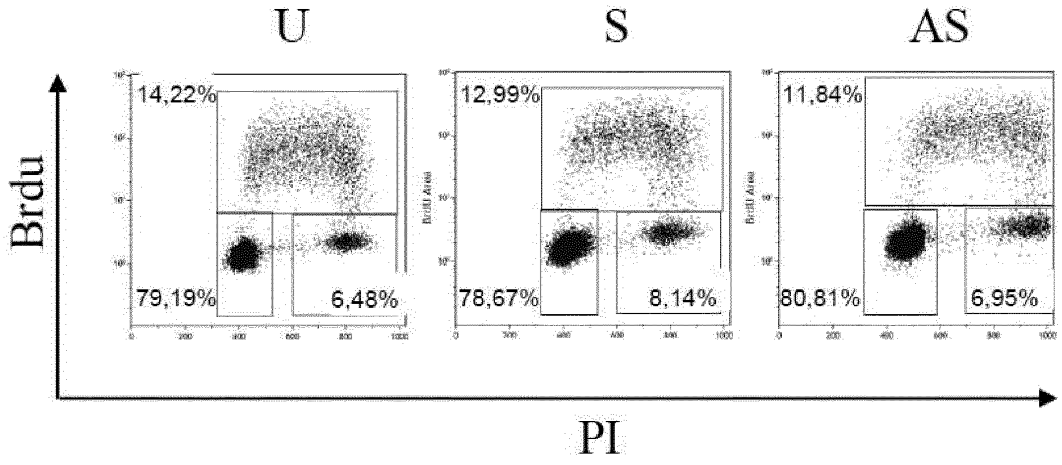

U
S
AS
Brdu
PI
14,22%
79,19%
6,48%
12,99%
78,67%
8,14%
11,84%
80,81%
6,95%

FIG. 4E

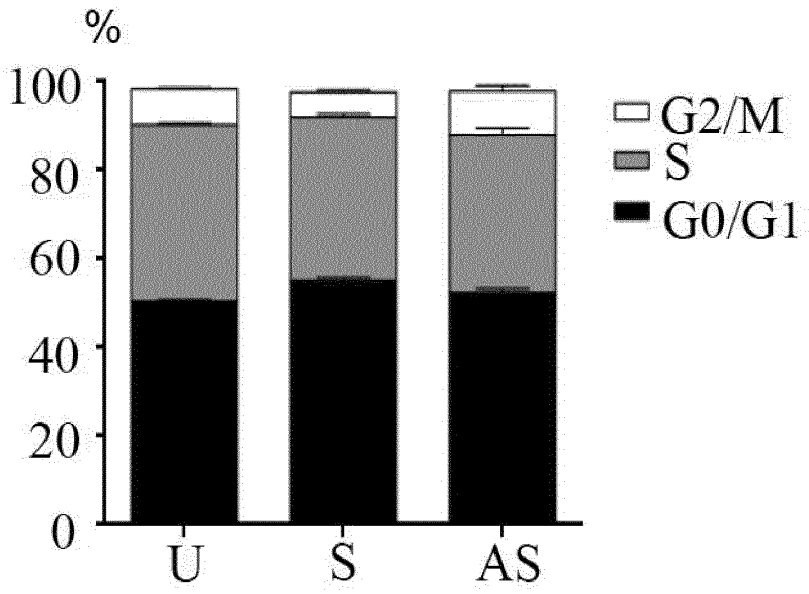

%
100
80
60
40
20
0
U
S
AS
G2/M
S
G0/G1

FIG. 4F

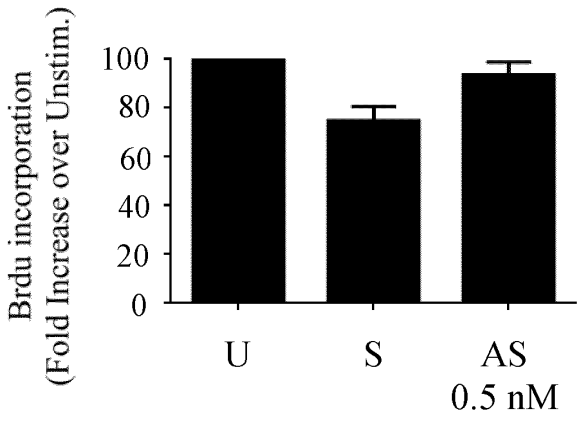

Brdu incorporation
(Fold Increase over Unstim.)
100
80
60
40
20
0
U
S
AS
0.5 nM

FIG. 4G

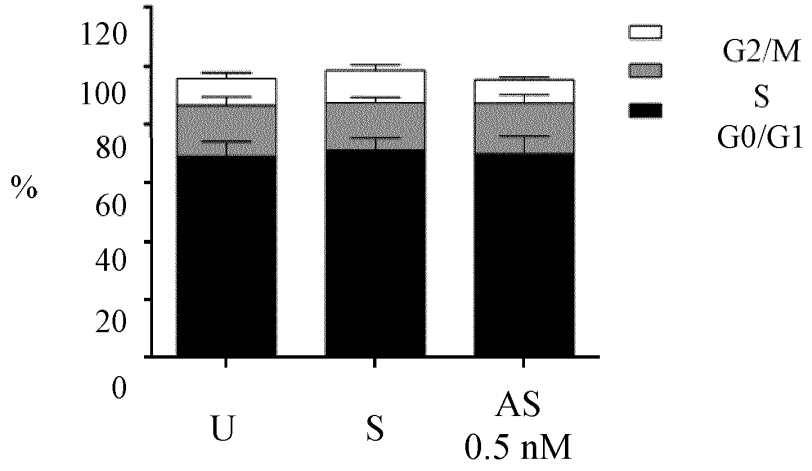

%
120
100
80
60
40
20
0
U
S
AS
0.5 nM
G2/M
S
G0/G1

FIG. 5A

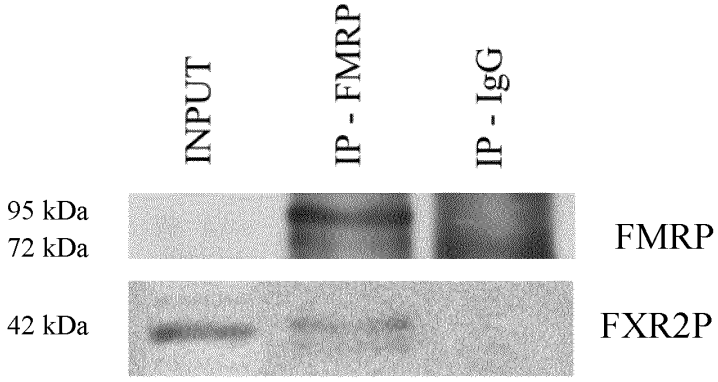

INPUT
IP - FMRP
IP - IgG
95 kDa
72 kDa
FMRP
42 kDa
FXR2P

FIG. 5B

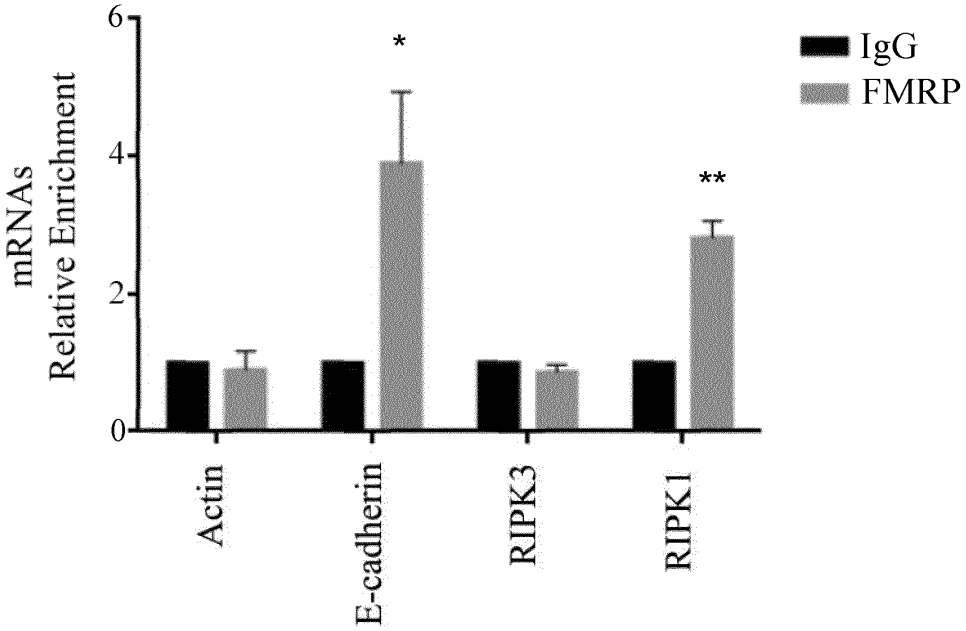

mRNAs
Relative Enrichment
6
4
2
0
*
**
IgG
FMRP
Actin
E-cadherin
RIPK3
RIPK1

FIG. 5C

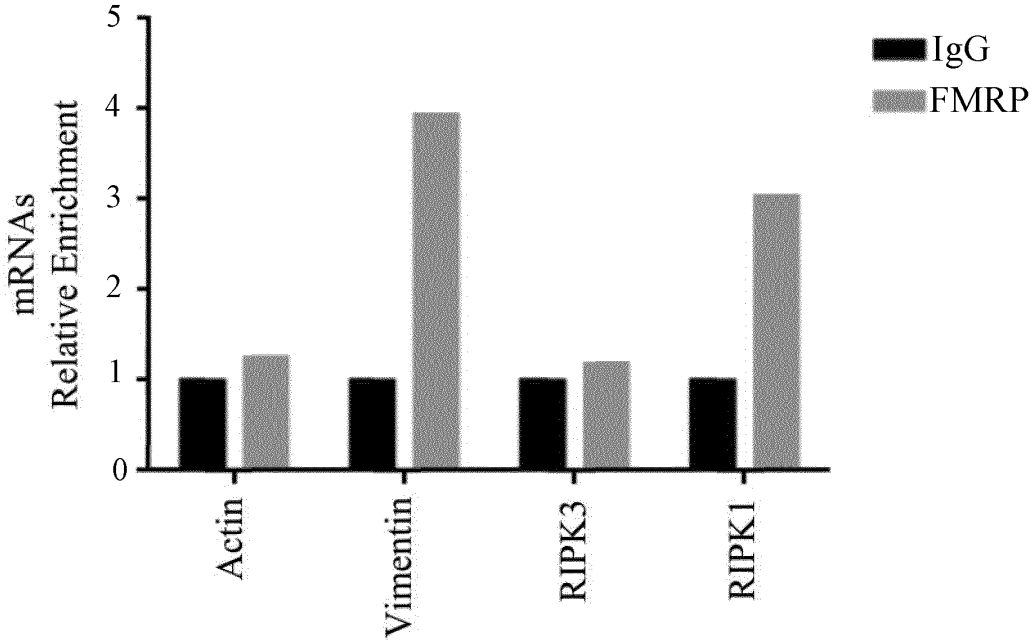

mRNAs
Relative Enrichment
5
4
3
2
1
0
IgG
FMRP
Actin
Vimentin
RIPK3
RIPK1

FIG. 6A

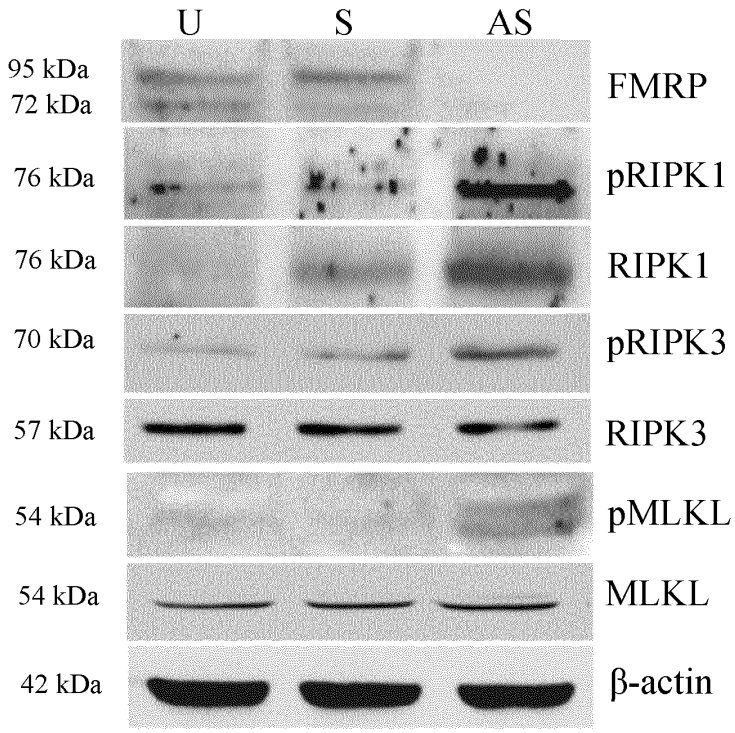

U
S
AS
95 kDa
72 kDa
FMRP
76 kDa
pRIPK1
76 kDa
RIPK1
70 kDa
pRIPK3
57 kDa
RIPK3
54 kDa
pMLKL
54 kDa
MLKL
42 kDa
β-actin

FIG. 6B

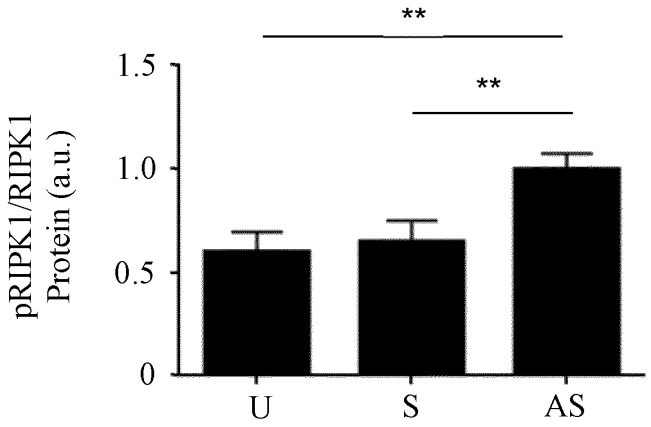


FIG. 6C

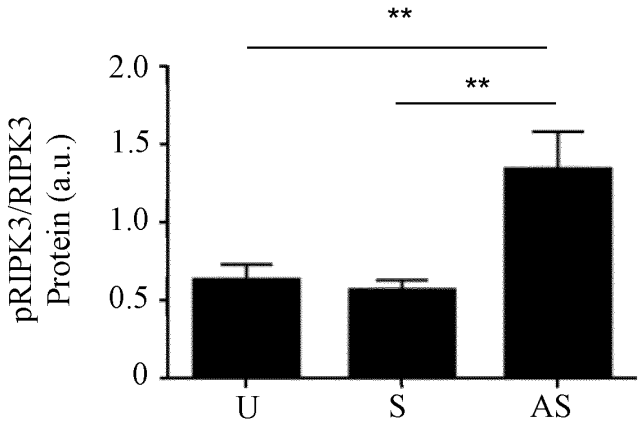


FIG. 6D

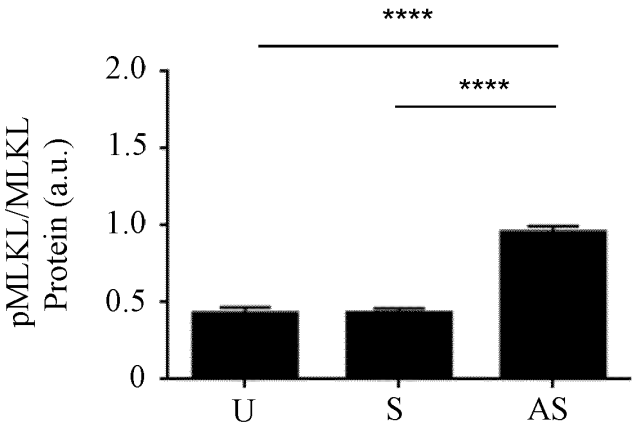


FIG. 6F

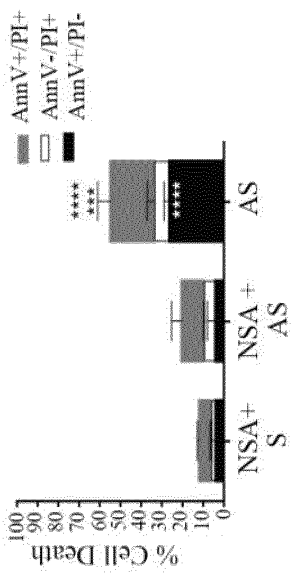

AnnV+/PI+
AnnV-/PI+
AnnV+/PI-
% Cell Death
0
10
20
30
40
50
60
70
80
90
100
NSA+ S
NSA+ AS
AS
****
***

FIG. 6E

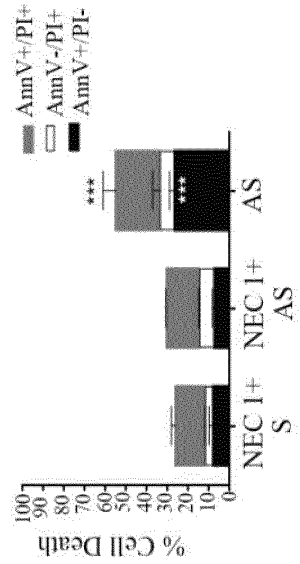

AnnV+/PI+
AnnV-/PI+
AnnV+/PI-
% Cell Death
0
10
20
30
40
50
60
70
80
90
100
NEC 1+ S
NEC 1+ AS
AS
***

FIG. 6G

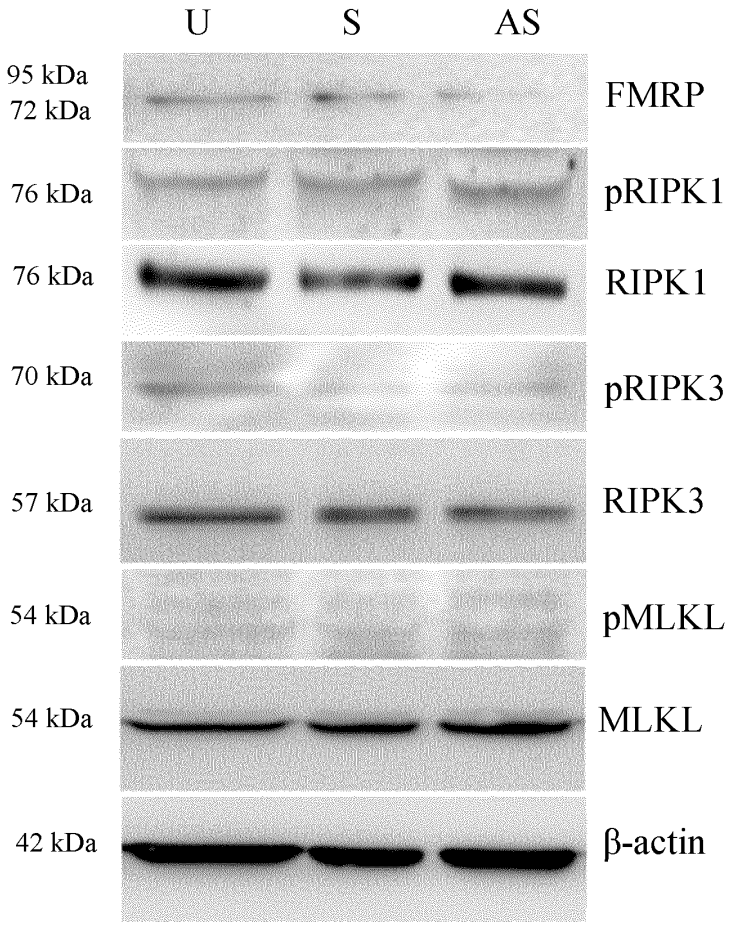

U
S
AS
95 kDa
72 kDa
FMRP
76 kDa
pRIPK1
76 kDa
RIPK1
70 kDa
pRIPK3
57 kDa
RIPK3
54 kDa
pMLKL
54 kDa
MLKL
42 kDa
β-actin

FIG. 7A

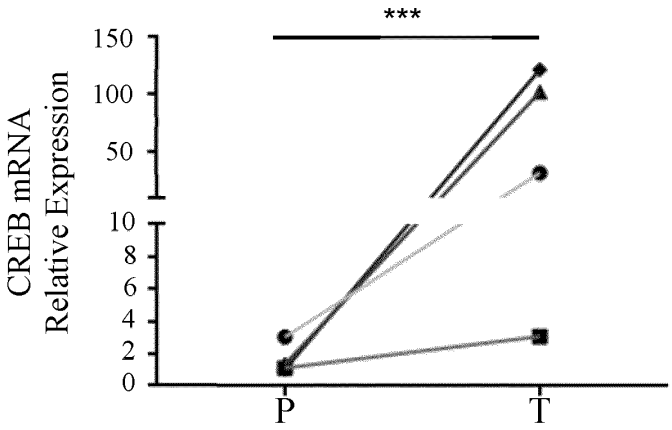


FIG. 7B

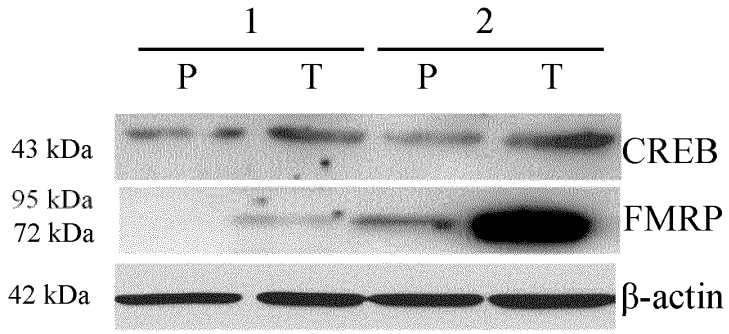


FIG. 7C

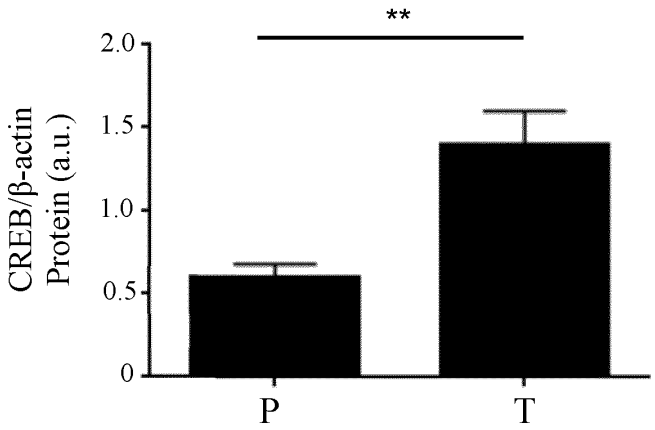


FIG. 7D

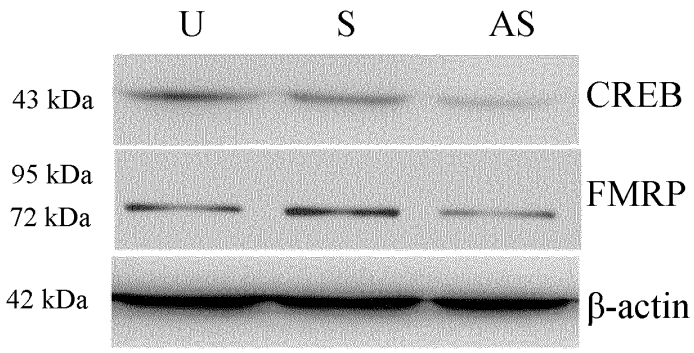


FIG. 7E

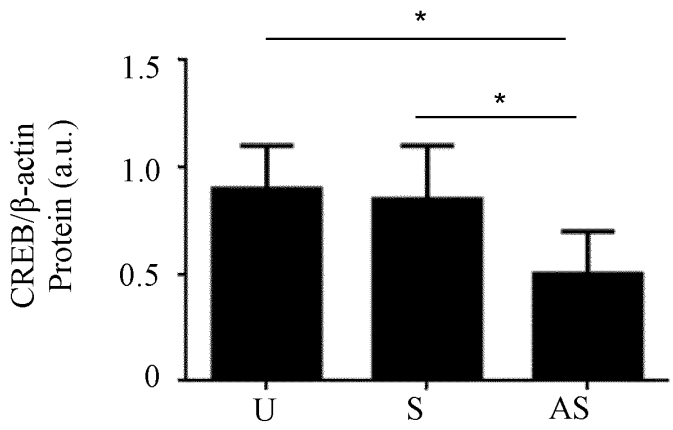


FIG. 7F

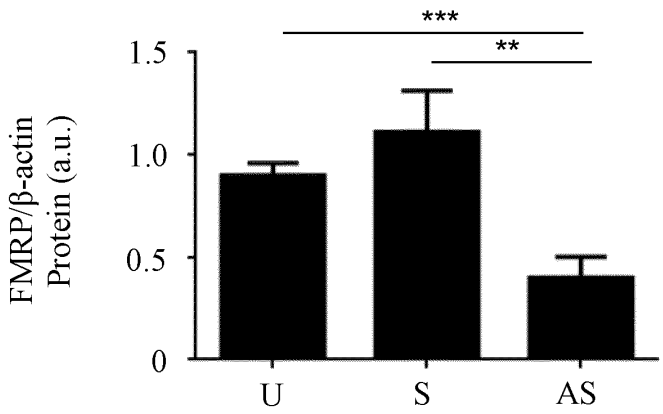


FIG. 8A

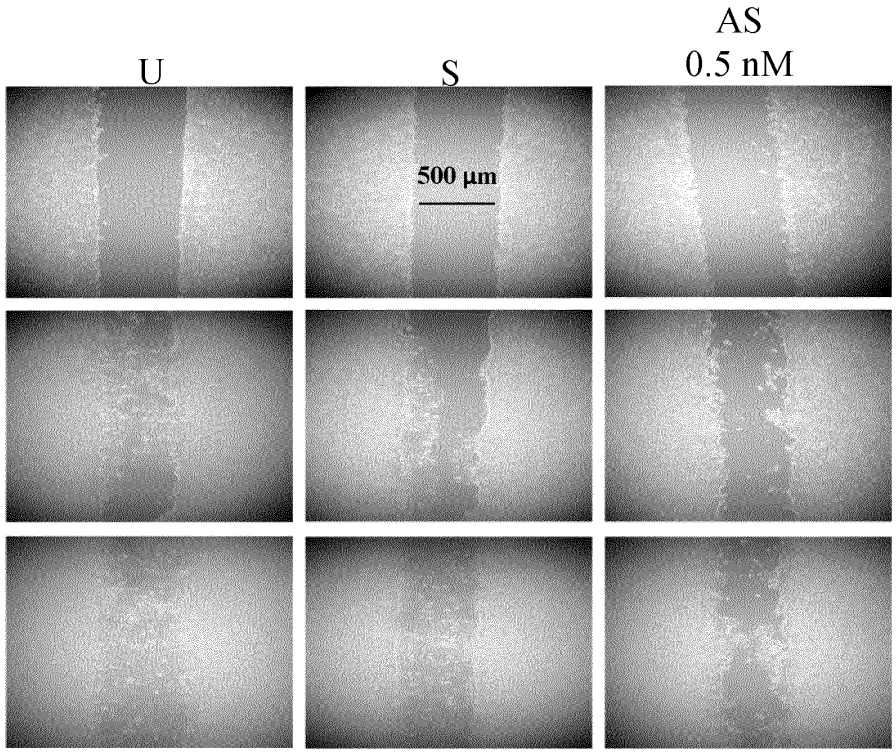

U
S
AS
0.5 nM
T0
T24
T48
500 µm

FIG. 8B

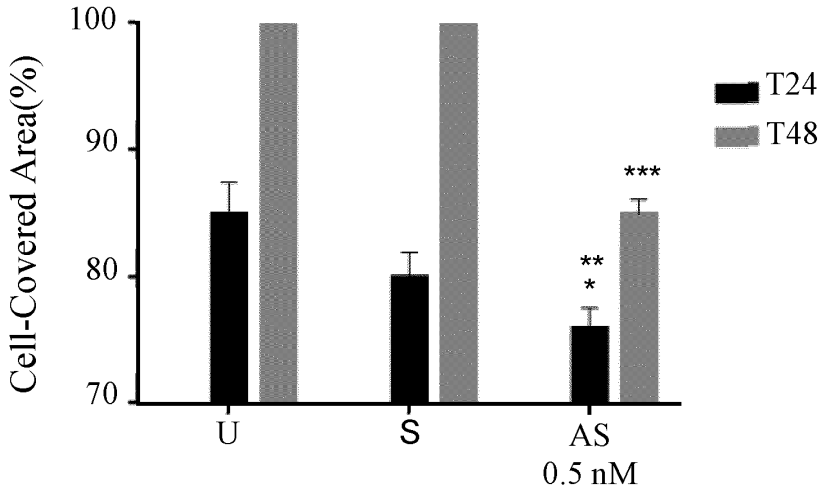

Cell-Covered Area(%)
100
90
80
70
T24
T48
***
**
*
U
S
AS
0.5 nM

FIG. 8C

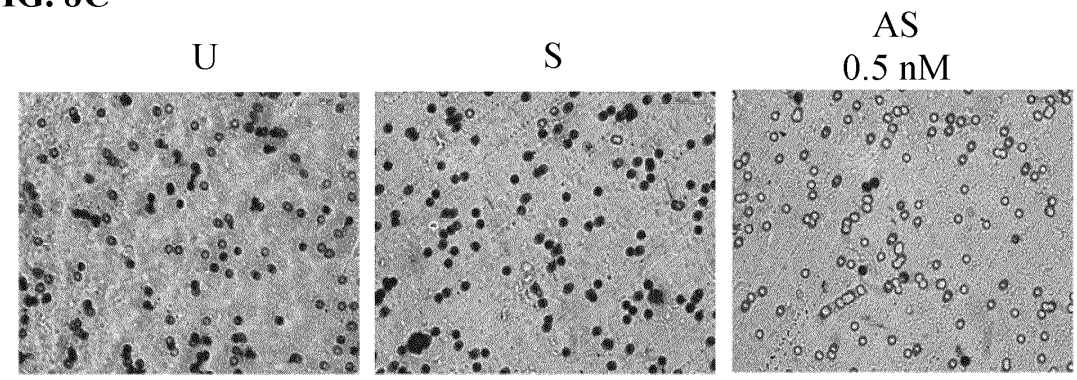


FIG. 8D

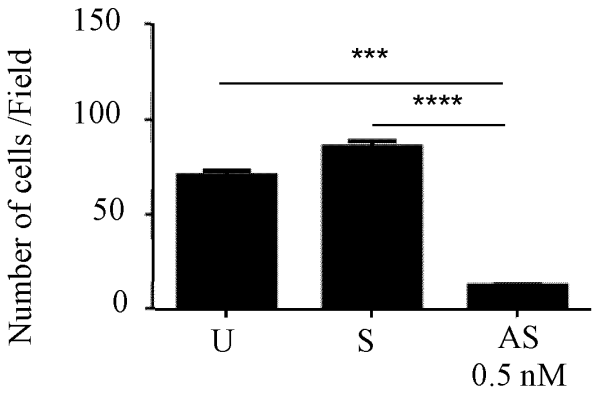


FIG. 8E

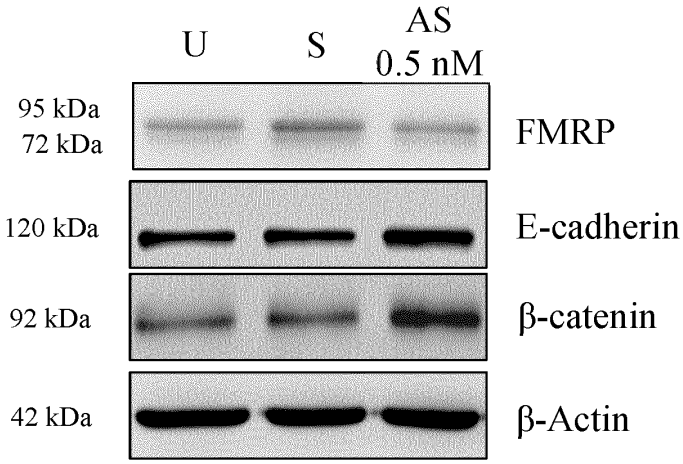


FIG. 8F

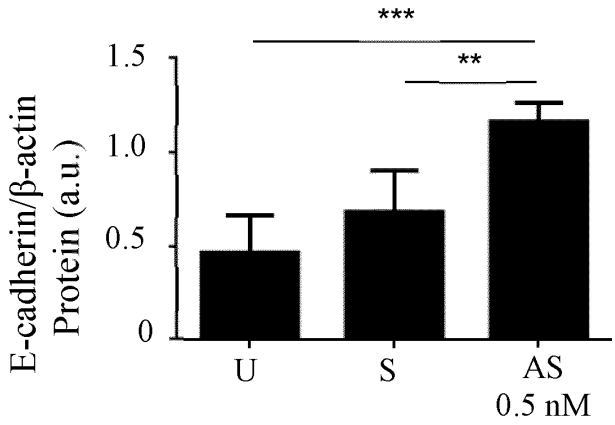


FIG. 8G

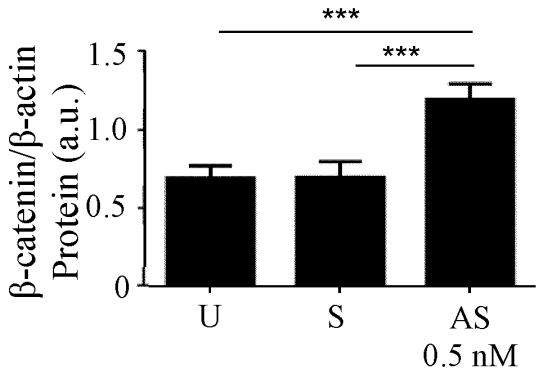


FIG. 9A

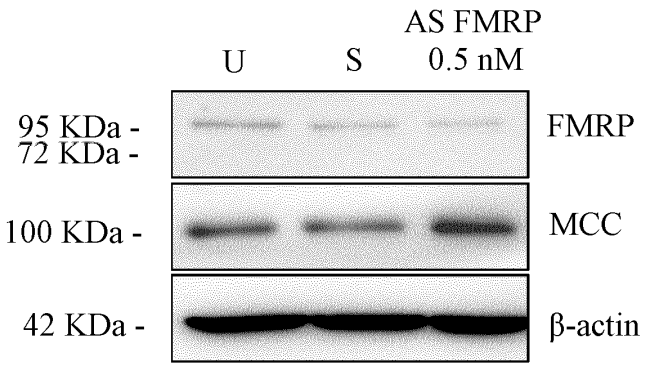

AS FMRP
U
S
0.5 nM
95 KDa -
72 KDa -
FMRP
100 KDa -
MCC
42 KDa -
β-actin

FIG. 9B

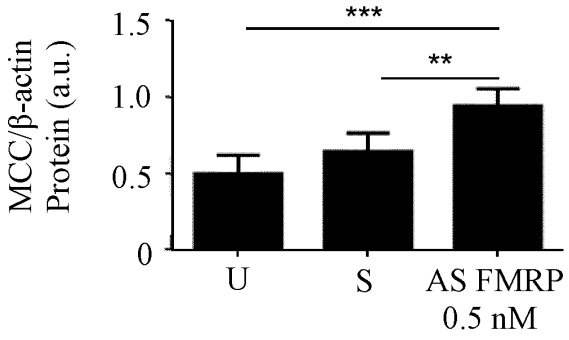

MCC/β-actin
Protein (a.u.)
1.5
1.0
0.5
0
***
**
U
S
AS FMRP
0.5 nM

FIG. 9C

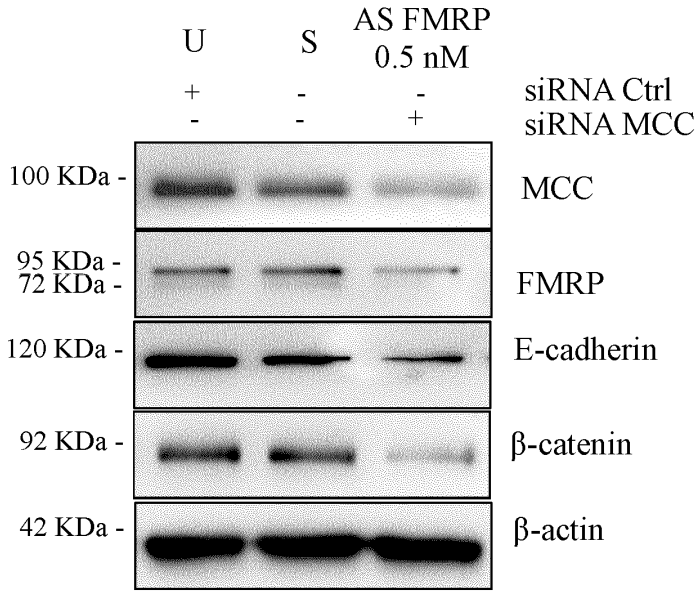

U
S
AS FMRP 0.5 nM
+
-
-
siRNA Ctrl
-
-
+
siRNA MCC
100 KDa -
MCC
95 KDa -
72 KDa -
FMRP
120 KDa -
E-cadherin
92 KDa -
β-catenin
42 KDa -
β-actin

FIG. 9D

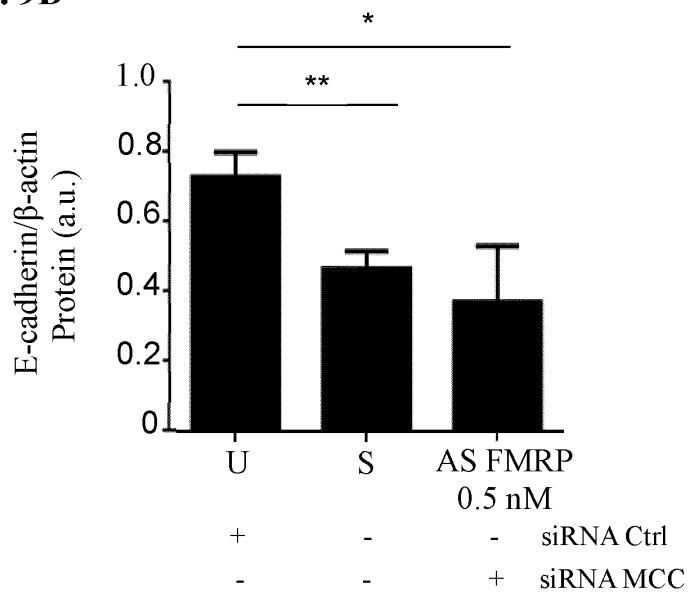

*
**
1.0
0.8
0.6
0.4
0.2
0
E-cadherin/β-actin Protein (a.u.)
U
S
AS FMRP 0.5 nM
+ - - siRNA Ctrl
- - + siRNA MCC

FIG. 9E

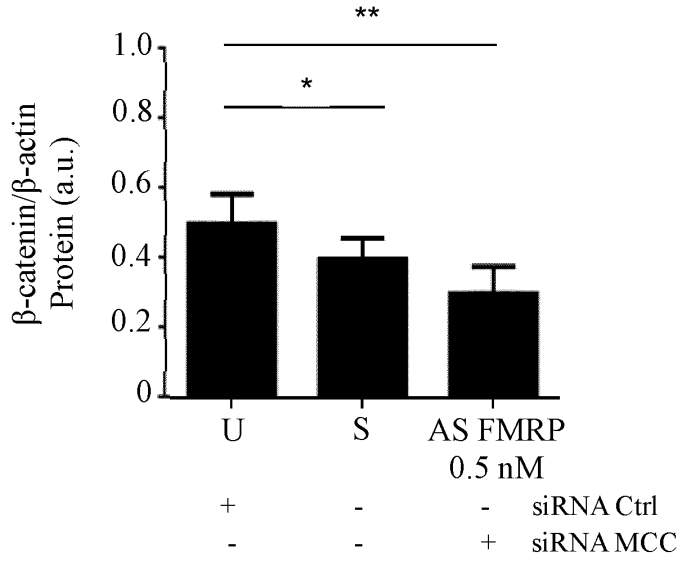
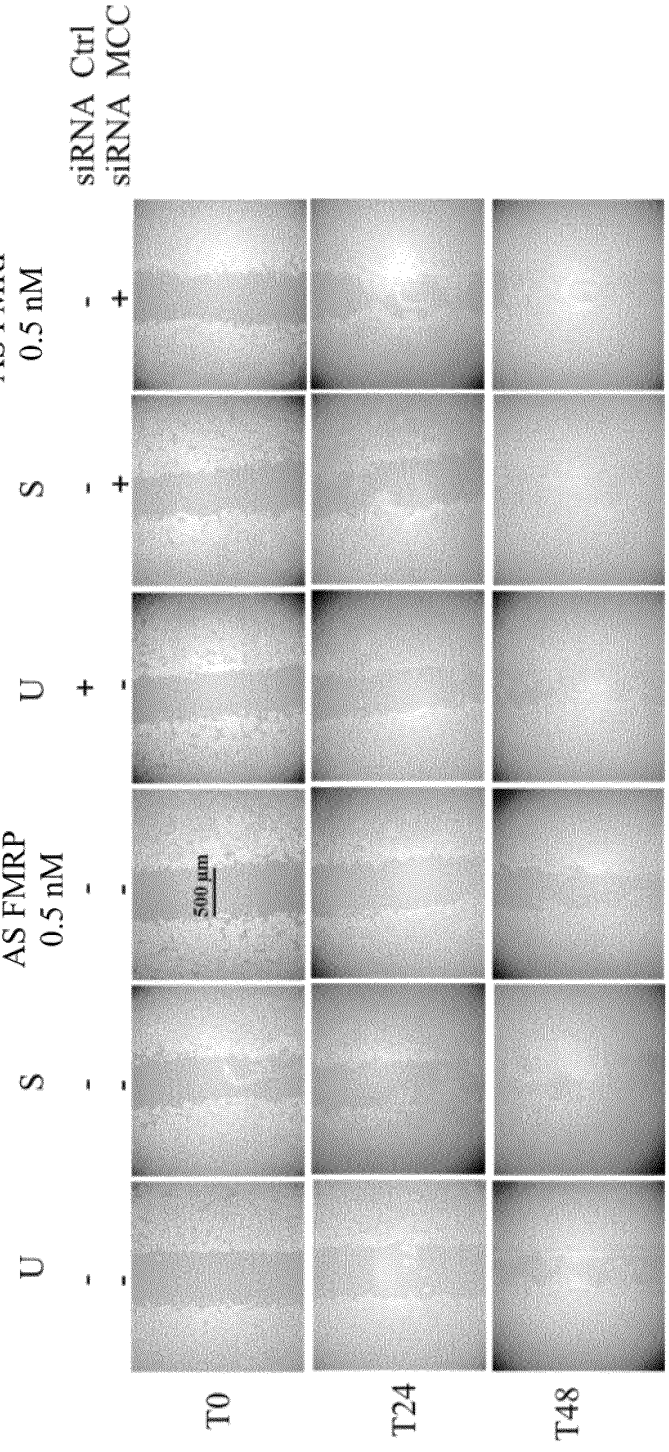

**
*
1.0
0.8
0.6
0.4
0.2
0
β-catenin/β-actin Protein (a.u.)
U
S
AS FMRP 0.5 nM
+ - - siRNA Ctrl
- - + siRNA MCC

FIG. 9F


U
S
AS FMRP 0.5 nM
U
S
AS FMRP 0.5 nM
siRNA Ctrl
siRNA MCC
500 µm
T0
T24
T48

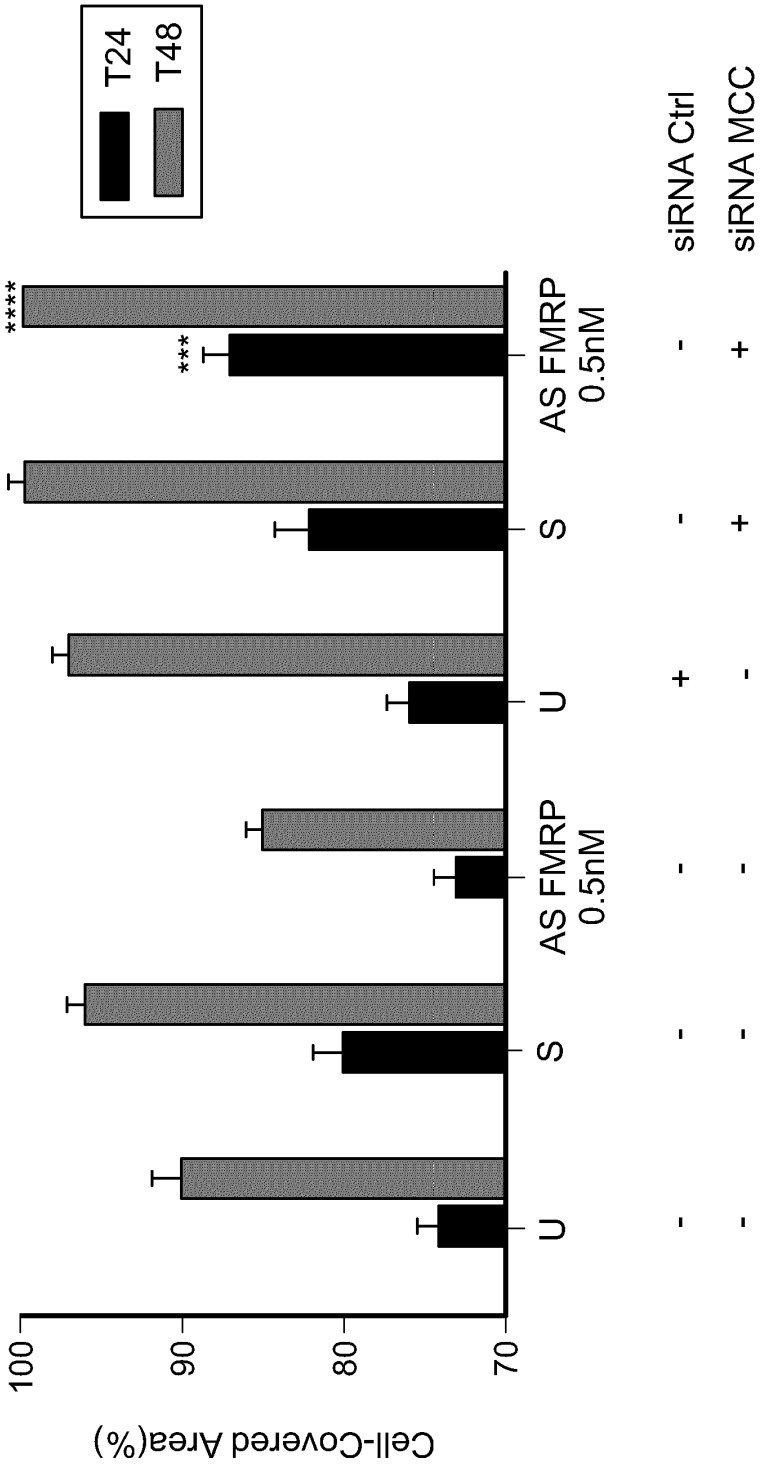

T24
T48
Cell-Covered Area(%)
100
90
80
70
U
S
AS FMRP 0.5nM
U
S
AS FMRP 0.5nM
***
****
siRNA Ctrl
siRNA MCC

FIG. 9G