

Spheroid Formation and Application in Anti-Cancer Drug test using LIPIDURE®-COAT

Materials

1. LIPIDURE®-COAT PLATE A-U96 (Cat No. AMS.51011610)
2. Cell; Hep G2 (Hepatocellular carcinoma, human)

Cell culture medium

1. 10 %FCS-DMEM; DMEM (Dulbecco's Modified Eagle's Medium) containing 10 %FCS (fetal calf serum), 50 IU/mL penicillin, 50 µg/mL streptomycin.

Cell preparation

1. Hep G2 cells were maintained in the 10 %FCS-DMEM and were passaged every 4~7 days.

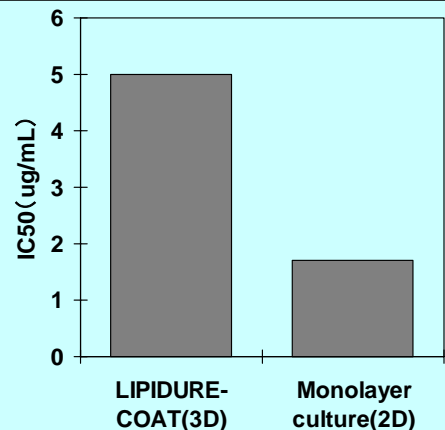
Spheroid formation

1. The cells were trypsinized and plated at a seeding density of 2,000 cells/well (0.1 mL/well) on LIPIDURE®-COAT Plate.
 2. The plate was Incubated at 37°C in 5 %CO₂ incubator for 1~5 days.
 3. The spheroids were formed.
- * The medium was gently changed every other day by pipetting (Recommend the exchange of only half volume of medium).

Application for cancer research

1. Mitomycin-C was added and the plate was incubated for 2 days.
2. Cell viabilities were measured by WST assay.

Anticancer activity of Mitomycin-C to Hep G2 cells



Other Cell Lines

You can form the corresponding spheroids from the following cell lines by using LIPIDURE®-COAT. You would be able to form spheroids from other cell lines which are not shown here.

•human ES, mouse ES, human iPS, mouse iPS, HepG2, NIH3T3, preadipocyte and cancer cell.



UK & Rest of World

184 Milton Park, Abingdon
OX14 4SE, Oxon, UK
Tel: +44 (0) 1235 828 200
Fax: +44 (0) 1235 820 482

Switzerland

Centro Nord-Sud 2E
CH-6934 Bioggio-Lugano
Tel: +41 (0) 91 604 55 22
Fax: +41 (0) 91 605 17 85

Deutschland

Bockenheimer Landstr. 17/19
60325 Frankfurt/Main
Tel: +49 (0) 69 779099
Fax: +49 (0) 69 13376880

North America

23591 El Toro Rd, Suite #180
Lake Forest, CA 92630
Tel: + 1 800 987 0985
Fax: + 1 949 265 7703

amsbio

info@amsbio.com

www.amsbio.com
AMS Biotechnology

Spheroid Formation on LIPIDURE®-COAT

Materials

1. LIPIDURE®-COAT PLATE A-U96 (Cat No. AMS.51011610)
2. Cell; PC12 (Pheochromocytoma, Rat)
3. Poly L-Lysine coated plate or dish ; For PC12 culture (Not for spheroid formation)

Cell culture medium

1. 10 %FBS-10 %HS-DMEM; DMEM (Dulbecco's Modified Eagle's Medium) containing 10 %FBS (Fetal Bovine Serum), 10%HS(Horse Serum) , 50 IU/mL penicillin and 50 µg/mL streptomycin.

Cell preparation

1. PC12 cells were maintained in the 10 %FBS-10 %HS-DMEM on poly L-Lysine coated dish and were passaged every 4~7 days.

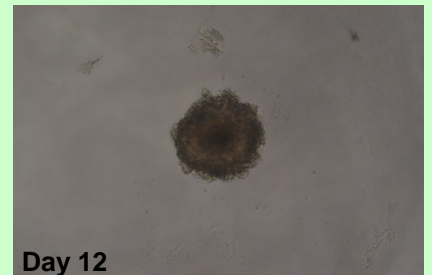
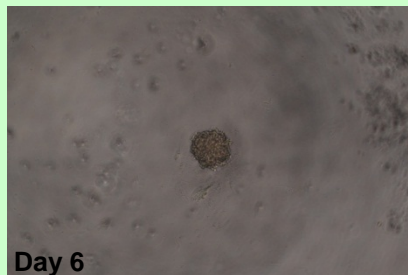
Spheroid formation

1. The cells were trypsinized and plated at a seeding density of 200 cells/well (0.2 mL/well) on LIPIDURE®-COAT Plate.
 2. The plate was incubated at 37°C in 5 %CO₂ incubator for 12 days.
 3. The spheroids were formed.
- * The medium was gently changed every other day by pipetting. (We recommend the change of half volume of medium.).

Application

1. You can use the spheroids for cell-based various assays.

PC12 spheroids formed on LIPIDURE®-COAT



Seeding density: 500 cells/well



UK & Rest of World

184 Milton Park, Abingdon
OX14 4SE, Oxon, UK
Tel: +44 (0) 1235 828 200
Fax: +44 (0) 1235 820 482

Switzerland

Centro Nord-Sud 2E
CH-6934 Bioggio-Lugano
Tel: +41 (0) 91 604 55 22
Fax: +41 (0) 91 605 17 85

Deutschland

Bockenheimer Landstr. 17/19
60325 Frankfurt/Main
Tel: +49 (0) 69 7790999
Fax: +49 (0) 69 13376880

North America

23591 El Toro Rd, Suite #180
Lake Forest, CA 92630
Tel: +1 800 987 0985
Fax: +1 949 265 7703

amsbio

info@amsbio.com

www.amsbio.com
AMS Biotecnology

Spheroid Formation on LIPIDURE[®]-COAT

Materials

1. LIPIDURE[®]-COAT PLATE A-U96 (Cat No. AMS.51011610)
2. Cell; MCF7 (breast adenocarcinoma, Human)

Cell culture medium

1. 10 %FBS-MEM; DMEM (Dulbecco's Modified Eagle's Medium) containing 10 %FBS (Fetal Bovine Serum), 1mM NEAA (Non Essential Amino Acids), 1mM Sodium Pyruvate, 50 IU/mL penicillin and 50 µg/mL streptomycin.

Cell preparation

1. MCF7 cells were maintained in the 10 %FBS-MEM on Tissue Culture Treated dish and were passaged every 7 days.

Spheroid formation

1. The cells were trypsinized and plated at a seeding density of 500~10,000 cells/well (0.1 mL/well) on LIPIDURE[®]-COAT Plate.
 2. The plate was incubated at 37°C in 5 %CO₂ incubator for 1~5 days.
 3. The spheroids were formed.
- * The medium was gently changed every other day by pipetting. (We recommend the change of half volume of medium.)

Application

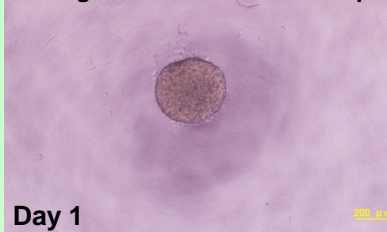
1. You can use the spheroids for cell-based various assays.

MCF7 spheroids formed on LIPIDURE[®]-COAT

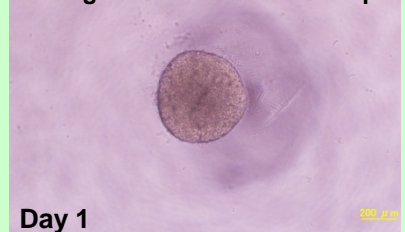
Seeding density: 500 cells/well
Average diameter: 176.5±8.9 µm



Seeding density: 5000 cells/well
Average diameter: 390.5±13.5 µm



Seeding density: 10000 cells/well
Average diameter: 481.8±16.5 µm



UK & Rest of World

184 Milton Park, Abingdon
OX14 4SE, Oxon, UK
Tel: +44 (0) 1235 828 200
Fax: +44 (0) 1235 820 482

Switzerland

Centro Nord-Sud 2E
CH-6934 Bioggio-Lugano
Tel: +41 (0) 91 604 55 22
Fax: +41 (0) 91 605 17 85

Deutschland

Bockenheimer Landstr. 17/19
60325 Frankfurt/Main
Tel: +49 (0) 69 779099
Fax: +49 (0) 69 13376880

North America

23591 El Toro Rd, Suite #180
Lake Forest, CA 92630
Tel: +1 800 987 0985
Fax: +1 949 265 7703

amsbio

info@amsbio.com

www.amsbio.com
AMS Biototechnology