

ncLaminin511

Product Manual

I. Product Introduction

ncLaminin511, also known as Laminin, is an improved recombinant ncLaminin511 that provides a chemically defined, animal-free, and xenogeneic-free culture environment, suitable for use without a feeder layer. Additionally, ncLaminin511 incorporates cell adhesion sites from human fibronectin type III domain on the Laminin E8 fragment, which enhances cell adhesion compared to full-length Laminin, Vitronectin, and Matrigel. This product is designed to support the attachment and culture of human pluripotent stem cells (hPSC), neurons, and other cell types.

II. Product Information

Table 1: ncLaminin511 Product Description

Product	Amount	Cat.No.	Storage Conditions
ncLaminin511	1 mL (100 µg/mL)	RP01025	-20°C

III. Instruction

- The recommended concentration of ncLaminin511 is 0.5 µg/cm². For example, for a 6-well plate with a well area of 10 cm², 5 µg of ncLaminin511 is required for coating.
- According to Table 2, for a 6-well plate (total 60 cm²), 30 µg of ncLaminin511 is required, which corresponds to 300 µL (100 µg/mL). Store the ncLaminin511 in aliquots of 300 µL (30 µg) at -20°C or -80°C. Thaw one aliquot and dilute it with DPBS to prepare the working solution for coating one 6-well plate.

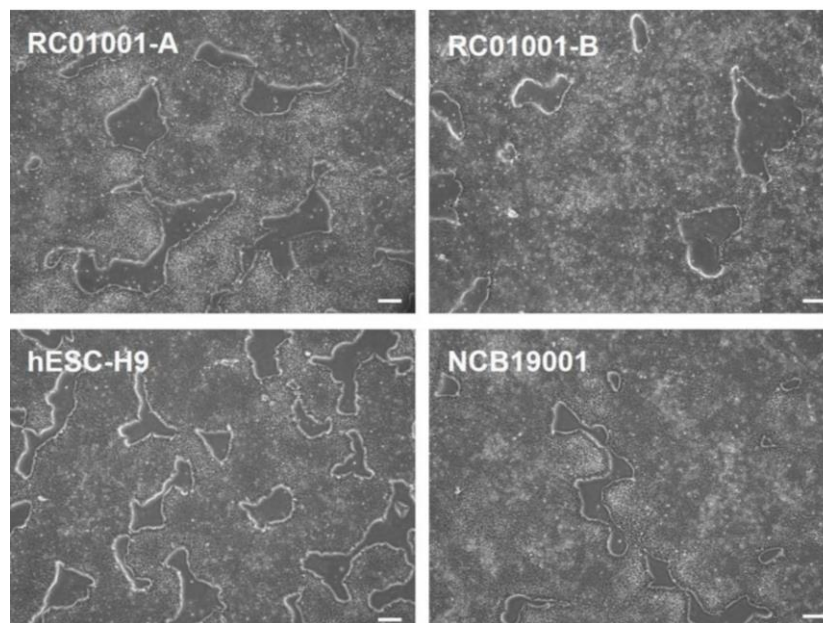
Table 2: Recommended dosage of ncLaminin511 for different culture vessels.

Container	Area	ncLaminin511 Usage
6-well plate	10 cm ² /well	5 µg
60-mm culture Dish	20 cm ²	10 µg
100-mm culture Dish	60 cm ²	30 µg
T-25 culture flask	25 cm ²	12.5 µg

IV. Coating Procedure (Example for 6-well plate; applicable to other culture containers)

- Take 1 tube of ncLaminin511 (300 µL, 30 µg) and thaw at room temperature (15°C - 25°C).
- Prepare a 15 mL centrifuge tube with 9 mL of DPBS (without Ca²⁺ or Mg²⁺). Add the thawed ncLaminin511 to the DPBS and gently mix without vortexing.

3. Coat the wells with the diluted ncLaminin511 working solution using 1.5 mL per well for a 6-well plate.
4. Gently shake the culture dish so that the diluted ncLaminin511 Working Solution spreads evenly over the bottom surface of the dish.
5. Allow to stand at room temperature (15 - 25°C) for at least 1 hour before use.
TIP: If not used immediately, seal the plate to prevent evaporation. Store coated plates at 4 °C and use within one week. Before use, allow the plate to equilibrate at room temperature (15 °C–25 °C) for 30 minutes.
6. When ready to use, tilt the plate and aspirate the coating solution with a pipette or pipette tip. Ensure that the bottom surface of the well is free from scratches. No additional rinsing is required.
7. ncLaminin511 is intended for adherent culture of human pluripotent stem cells (hPSCs), neurons, and other cell types.



ncLaminin511 supports the growth of various human pluripotent stem cell (hPSC) lines.

The images above show the morphology of RC01001-A, RC01001-B, H9, and NCB19001 cells on Day 4 of culture using the NcEpic medium for hiPSCs/hESCs.

Scale bar: 200 μ m.