

## CERTIFICATE OF ANALYSIS

**PRODUCT:** Corning® Matrigel® Matrix for Organoid Culture, Phenol Red-free, 10 ml Vial  
**CATALOG NUMBER:** 356255

**LOT NUMBER:** 2136002

**SOURCE:** Engelbreth-Holm-Swarm (EHS) Mouse Tumor  
**FORMULATION:** Dulbecco's Modified Eagle's Medium with 50 µg/mL gentamycin.

**ORGANOID CULTURE:** Corning Matrigel matrix for organoid culture has been verified to support the growth of mouse intestinal organoids for more than 7 passages with typical budding morphology and marker expression<sup>1</sup> using HUB Organoid Technology methods\*. This product has also been verified to support the formation of polarized 3D structures of primary human airway epithelial cells expressing typical markers<sup>2</sup>.

**STORAGE:** Store at -20°C. Avoid multiple freeze-thaws. Do not store in frost-free freezer. **KEEP FROZEN.**

### QUALITY CONTROL:

| Specification                      | Criteria  | Result   |
|------------------------------------|---|----------|
| Protein Concentration              | Results obtained by Lowry method and represented in mg/mL.  | 9.1      |
| Endotoxin                          | Endotoxin units (EU/mL) are measured by Limulus Amoebocyte Lysate assay.  | < 1.5    |
| Elastic Modulus (matrix stiffness) | Elastic modulus (Pa) is measured by single frequency oscillatory measurements using a parallel plate rotational rheometer. The plateau of the elastic component of the shear modulus (G') at 37°C is reported as the elastic modulus.   | 71.3     |
| Dome Formation and Maintenance     | Tested for ability to form and maintain droplets on pre-incubated TC-treated 24-well surface. The 50 µL droplets were made with Corning Matrigel matrix for organoid culture (diluted to 7 mg/mL with DMEM) and 750 µL of DMEM was added to each well. These droplets were maintained for a period of 7 days in a humidified incubator at 37°C. | PASS     |
| Gelling                            | Tested for ability to gel quickly and maintain this form with culture medium for a period of 14 days at 37°C.   | PASS     |
| Biological Activity                | Biological activity is determined using a neurite outgrowth assay. Chick dorsal root ganglia are plated on a 1.0 mm layer of Corning Matrigel matrix. Tested for a positive neurite outgrowth response after 48 hours without addition of nerve growth factor.  | PASS     |
| Sterility                          | Tested for the presence of bacteria, fungi, and mycoplasma.   | NEGATIVE |
| MAP Test                           | Mouse colonies screened for Sendai, MHV, PVM, TEMV/GDVII, Ectro, Polyoma, MRV/EDIM, LCM, MCMV, M.Ad, Reo, MPV, LDEV/LDHV, MTV, Hantaan, K, RCMV, CARB   | NEGATIVE |
| PCR Test                           | Tumor source tested for <i>Mycoplasma spp.</i> , <i>Helicobacter</i> , LDEV/LDHV, Sendai, MHV, PVM, MMV/MVM, MPV, Reo (1, 2, 3), MRV/EDIM, Ectro, LCM, K, MTV, Polyoma, Hantaan, Seoul, M. Ad (1, 2), MCMV, Norovirus, TMEV/GDVII, KRV, Toolan's H-1, RCV/SDA.<br><br>Finished goods tested for LDEV/LDHV.                                      | NEGATIVE |

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**SAFETY RECOMMENDATION:** Handle in accordance with good industrial hygiene and laboratory safety practices

**Expiration Date:** October 31, 2024

Quality Assurance

Chad M. K.

Date

September 02, 2022

**References:**

1. Application note (Corning Lit. Code CLS-AN-542). Culture of mouse intestinal organoids in Corning Matrigel matrix for organoid culture.
2. Application note (Corning Lit. Code CLS-AN-534). High throughput gene expression analysis of 3D airway organoids.

\*Should you intend to use the HUB organoid technology for commercial purposes, please contact the HUB at [info@hub4organoids.nl](mailto:info@hub4organoids.nl).