

Info Sheet for Technical description

No.0007

Organization

* Mandatoty fields

Name of Organization*	MATRIXOME, Inc.	
Address, City, States, Zip, Country*	3-2 Yamadaoka, Suita-shi, Osaka 565-0871, Japan	
URL	https://matrixome.co.jp/en/	
Brief Descriptions of Organization* (Approx. 100 words)	Matrixome Inc. is a biotechnology company specializing in the development, production, and distribution of extracellular matrix (ECM) proteins, particularly recombinant laminin fragments such as iMatrix-511. These innovative substrates provide defined, xeno-free, and highly reproducible environments for the culture of human embryonic stem (ES) and induced pluripotent stem (iPS) cells. Matrixome supports both basic research and clinical applications in regenerative medicine. The company also pursues next-generation ECM technologies, such as perlecan conjugated laminin fragmens, to advance cell therapy, tissue engineering, and pharmaceutical research worldwide.	
Contact address	Name*	TAKUJI YAMAMOTO
	Department* / Position	Administration/ CEO
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What kind of technology do you want to offer? *

- ☐ **A.** Clinical Development Pipelines
- ☒ **B.** Regenerative Medicine-related Consumables / Instruments / Materials / CDMO Services etc.
- ☐ **C.** Platform Technologies(*) that are not included in the above (Group B)

→ Please see **Sheet [A]**→ Please see **Sheet [B]**→ Please see **Sheet [C]**

* Peripheral technologies that contribute to a significant improvement in productivity throughout the value chain of pharmaceuticals, from research and development to manufacturing and ultimately market launch.

If you agree to the following, please check "Yes" below. *

The technologies introduced in this 'Info Sheet' are in the public domain, as they have been published in research papers or have related patent applications.

- ☒ Yes

Do you have any collaborations/partnerships with pharmaceutical companies?

- ☐ Yes
- ☒ No

If you have already received funding from VCs or other sources, up to which stage has the investment round progressed?

- ☐ Angel / Seed (including AMED/JST grants)
- ☒ Series A
- ☐ Series B
- ☐ Series C
- ☐ Series D or further advanced stages

Do you agree to leave your presentation materials at FIRM hands and entrust us to make use of them for the purpose of promoting your partnering opportunities? *

Options*	Comments
☒ Yes	
☐ No	

Filled in by*

Date*

TAKUJI YAMAMOTO

1. Sep. 2025

Sheet [B] Regenerative Medicine-related Consumables / Instruments / Materials / CDMO Services etc.**Info Sheet for Technical overview**

No. B-0007

* Mandatoty fields

Title***iMatrix for cell culture substrate****Category***

- | | | |
|---|--|---|
| ☐ Facilities | ☐ Manufacturing equipment | ☐ Inspection equipment |
| ☐ Cells | ☐ Culture medium | ☒ Reagents |
| ☐ Cell banking | ☐ Storage / Container | ☐ Logistics |
| ☐ Cell / Viral vector manufacturing technology | | |

Description*

MATRIXOME Inc. is a leading biotechnology company in Japan dedicated to providing advanced extracellular matrix (ECM) technologies for stem cell research and regenerative medicine. The company's flagship iMatrix series consists of recombinant laminin fragments, particularly laminin-511 E8, which serve as highly defined, xeno-free substrates for the culture of human Embryonic Stem Cells (ES), induced Pluripotent Stem Cells (iPS) and Mesencymal Stem Cells. These products, such as iMatrix-511, iMatrix-511 silk and iMatrix-511MG, enable stable Stem Cell adhesion, expansion, and maintenance of pluripotency under chemically defined conditions, supporting both basic research and clinical applications worldwide.

Building upon this expertise, MATRIXOME is now developing next-generation perlecan-laminin (perLAM) conjugates, designed to further enhance cell culture environments. Perlecan, a heparan sulfate proteoglycan naturally present in basement membranes, interacts with various growth factors and signaling molecules. By engineering laminin fragments covalently linked to perlecan domains, MATRIXOME aims to provide culture substrates that not only promote robust integrin-mediated adhesion but also deliver bioactive cues through growth factor binding. This dual functionality offers new possibilities for efficient cell expansion, differentiation control, and improved scalability in regenerative medicine manufacturing.

Through these innovations, MATRIXOME continues to advance ECM-based technologies that bridge basic research and clinical applications, contributing to the future of cell therapy and tissue engineering.

Filled in by*

TAKUJI YAMAMOTO

Date*

1. Sep. 2025