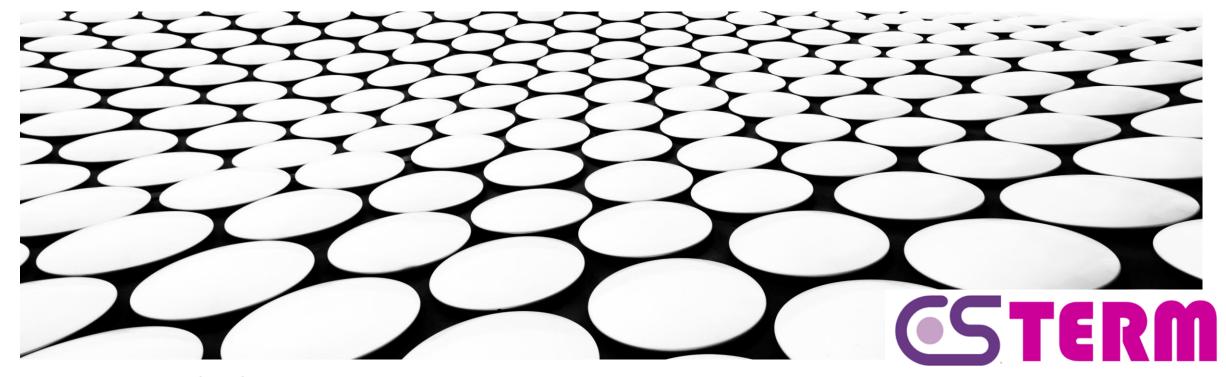
Introduction of Smart Cell Culture by SSCW®

SSCW: SMART SURFACE CULTURE WARE



Cell Sheet Tissue Engineering Regenerative Medicine Initiatives, Japan

SSCW ? SSCW : Smart Surface Culture Ware

a successful development of SSCW®, a highly functional and low-cost thermoresponsive smart surface culture ware Under the collaboration with Hosokawa Yoko Co., Ltd. and

TWINS, Institute of Advanced Biomedical Engineering and Science, Tokyo Women's Medical University.



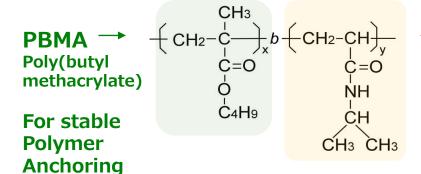
SSCW ? SSCW : Smart Surface Culture Ware

SSCW® is developed by innovative polymer nano-coating technologies to culture and harvest various types of cells without any damage, by just switching temperature of the culture wares



Switching surface by nano-level control of polymer coating

Smart Polymer Designing for SSCW

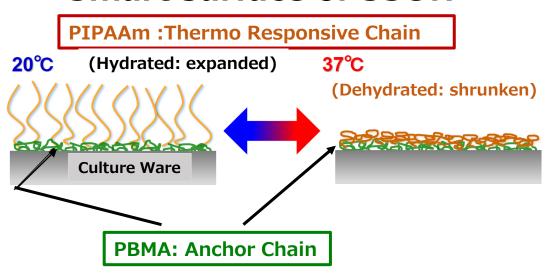


← PIPAAm

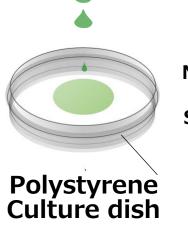
Poly(*N*-isopropyl acrylamide)

For cell Adhesion Control by Thermo-Switching

Smart surface of SSCW®



Smart Polymer Solution (no usage of monomer)



Nano-level thin fixing of Smart Polymer

Patent appied

Smart Surface Culture ware SSCW®



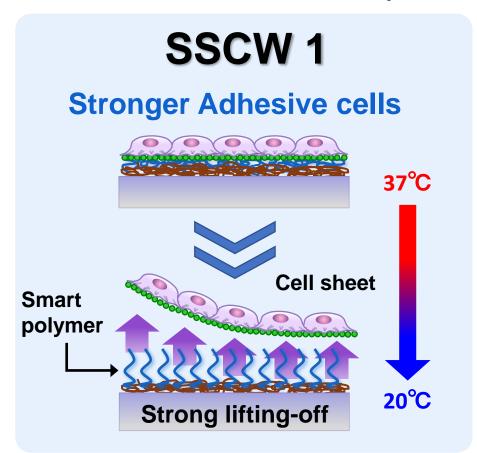
CSTERM will offer tailer-made thermo-responsive SSCW® to fit to various type of cells

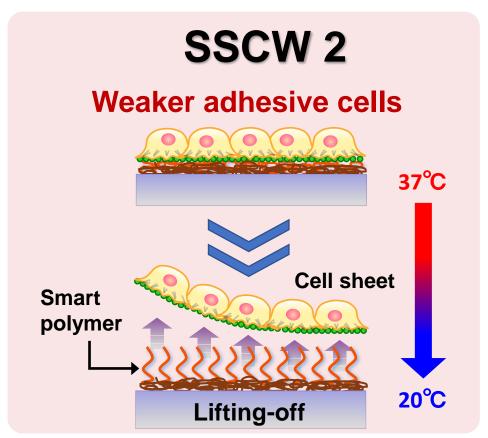
Smart Surface Culture Wares (SSCW®)



Patents applied By CSTERM

Basic Patent licensed from Tokyo Women's Medical University



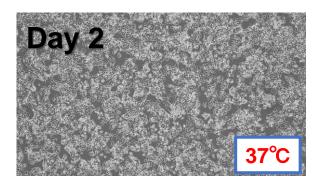


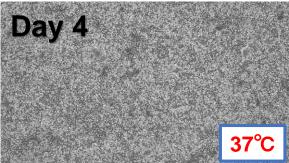
Unique polymer nanocoating technology produces "on-demand surface customization" for various type of cells.

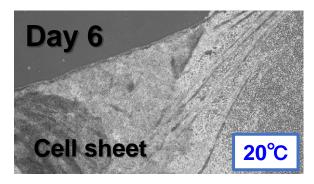
Cell Culture Application Examples of SSCW

SSCW 1

Human Hepatocellular Carcinoma Cells (HepG2)
Cells with strong adhesion and weak cell-cell junctions

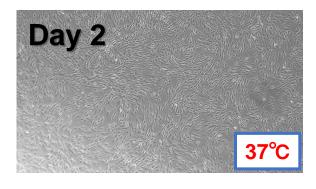


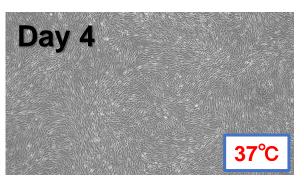


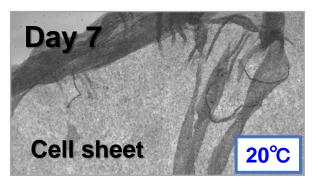


SSCW 2

Human Mesenchymal Stem Cells from Bone Marrow Cells with standard adhesion and cell-cell junctions







SSCW® WILL BE PRESENTED AT 24TH INTERPHEX WEEK TOKYO (TOKYO BIG SIGHT) JULY 13-15, 2022 About Exhibit Visit Conference Press INTERPHEX Global Events Exhibitor Search



Latest info & free sample of SSCW®-1, SSCW®-2 & SSCW®-A0 will be available at the exhibition booth of Hosokawa Yoko Co., Ltd. our essential collaboration partner of SSCW.

Please visit Stand 15-20 of West Wing.



Amazon Business site for international users

SSCW started to collaborate with JLSS to offer SSCW for international users





SSCW[®]





Amazon Business site is under development

Scientific papers related to SSCW 65T and its polymer technology

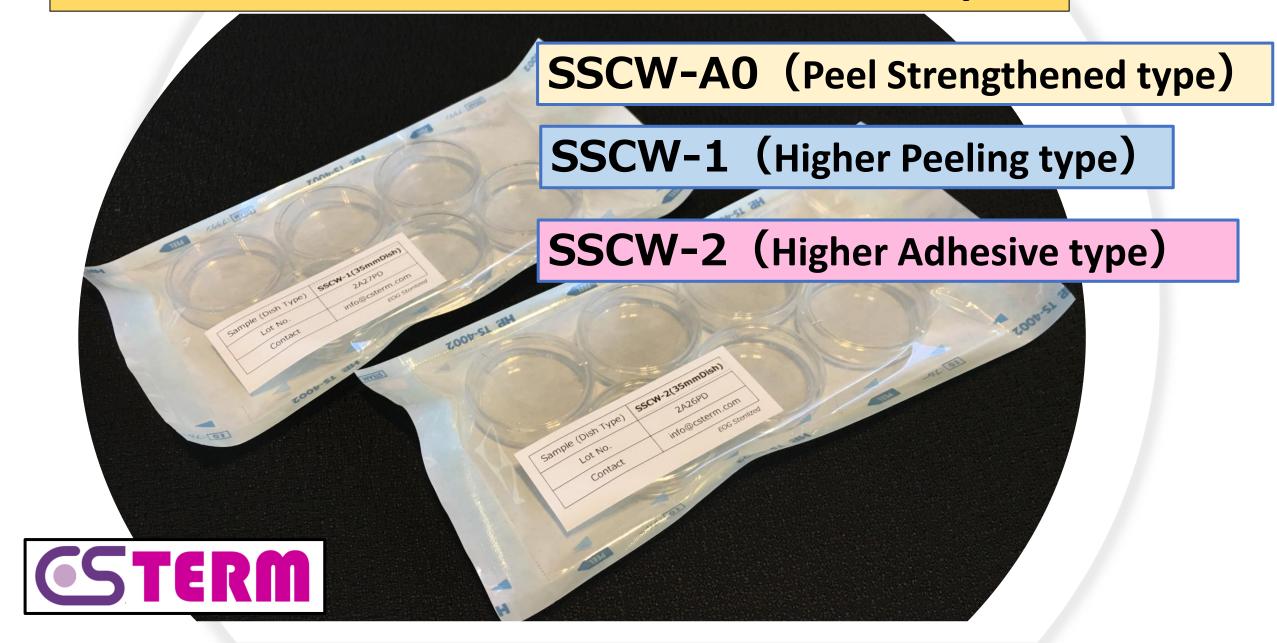


- Realization of Thermo-responsiveness
 - N. Yamada et. al., Makromol. Chem. Rapid Com., 1990
 - T. Okano et. al., Biomaterials, 1995
 - T. Okano et. al., Biomaterials, 1995
- Nano-coating technology of thermos-responsive polymer
 - M. Nakayama et. al., Macromol. Biosci., 2012
 - M. Nakayama et. al., J. Mater. Chem. B, 2020
 - M. Nakayama et. al., Macromol. Biosci., 2021
- Cell culture by SSCW samples
 - Y. Tobe, et.al., Microvascular Research 141 (May 2022)

https://www.sciencedirect.com/science/article/pii/S0026286222000115

Perfusable vascular tree-like construction in 3D cell-dense tissues using artificial vascular bed

Smart Surface Culture Ware SSCW ® **Samples**



SSCW® sample offering

SSCW® Sample type	Order Code	Box <content></content>	Price (tax excl.)
SSCW-1 (Higher Peeling)	S-SSCW1	SSCW®- 1 <18 dishes>	¥ 9,000
SSCW-2 (Higher Adhesive)	S-SSCW2	SSCW®- 2 <18 dishes>	¥ 9,000
SSCW-A0 (Peel Strengthened)	S-SSCWA0	SSCW®- A0 <18 dishes>	¥ 9,000
SSCW-Mix (trial set)	S-SSCWM1	SSCW®-1/2/A0 <6 dishes each>	¥ 9,000



:Sterilized packaging by 6 dishes

Please visit our Home Page to submit your order to CSTERM https://www.csterm.com/SSCW_Intro_ENG.html. In case of domestic shipping, Yu-Packet by Japan Post costs ¥381.