

**FUJIFILM****Wako**Code No. 192-19081 (100  $\mu$ L)

## StemSure<sup>®</sup> hPSC Remover (rBC2LCN-PE38, AF)

rBC2LCN is a recombinant protein of N-terminal domain of BC2L-C derived from *Burkholderia cenocepacia*. rBC2LCN has a high affinity to a O-glycan comprising an H type 3 structure on the podocalyxin which exists on the surface of undifferentiated human pluripotent stem cells (hPSCs), human ES cells and human iPS cells. Therefore, rBC2LCN has been reported as a marker of hPSCs.

This product is a recombinant lectin-toxin fusion protein composed of rBC2LCN fused with a truncated portion of *Pseudomonas aeruginosa* exotoxin A (termed rBC2LCN-PE38). This product induces cell death by inhibiting protein synthesis when internalized into hPSCs. Thus, this product is useful to remove undesired residual hPSCs from differentiated cell populations.

This product is produced using non-animal ingredients as raw materials.

This product is for laboratory use only ; use in any such application is the responsibility of the user.

### [Source]

*E. coli* expressed rBC2LCN-PE38

### [Formulation]

1  $\times$  PBS (-) sterilized with 0.1  $\mu$ m filter

### [Protein Concentration]

Indicated on the label

### [Protocol]

1. Prepare cell culture medium in which hPSCs are remaining in differentiated cell populations.
2. Add this product to the cell culture medium to make the final concentration of the solution 0.1  $\mu$ g/mL<sup>\*</sup>.
3. Incubate the cell culture plate under the culture conditions for the appropriate time<sup>\*</sup> to remove the remaining undifferentiated cells.
4. Replace with fresh medium suitable for the differentiated cells.

※ : Please demonstrate the appropriate concentration and incubation time to remove remaining hPSCs when the residual hPSCs are not completely removed.

### [Storage]

Store at -20°C

After thawing, store at 2~10°C and use within three weeks. If you will not be able to use within three weeks, you should make aliquots and store at -20°C. Avoid repeating freeze-thaw.

### [Package]

Code No.	Package
192-19081	100 $\mu$ L

### [References]

1. Tateno, H. and Saito, S. : *Molecules*, **22** (2017).
2. Tateno, H., Onuma, Y., Ito, Y., Minoshima, F., Saito, S., Shimizu, M., Aiki, Y., Asashima, M and Hirabayashi, J. : *Stem Cell Reports*, **4**, 811 (2015).
3. Onuma, Y., Tateno, H., Hirabayashi, J., Ito, Y. and Asashima, M. : *Biochem. Biophys. Res. Commun.*, **431**, 524 (2013).
4. Tateno, H., Matsushima, A., Hiemori, K., Onuma, Y., Ito, Y., Hasehira, K., Nishimura, K., Ohtaka, M., Takayasu, S., Nakanishi, M., Ikehara, Y., Nakanishi, M., Ohnuma, K., Chan, T., Toyoda, M., Akutsu, H., Umezawa, A., Asashima, M and Hirabayashi, J. : *Stem Cells Transl. Med.*, **2**, 265 (2013).
5. Tateno, H., Onuma, Y., Ito, Y., Hiemori, K., Aiki, Y., Shimizu, M., Higuchi, K., Fukuda, M., Warashina, M., Honda, S., Asashima, M. and Hirabayashi, J. : *Sci. Rep.*, **4**, 4069 (2014).

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