

rBC2LCN lectin exhibits significant affinity to a mucin-type *O*-glycan sugar chain called H-type3 (Fuc a1-2Gal β 1-3GalNAc) displayed on the podocalyxin binds to the surface of human pluripotent stem cells (hPSCs), human ES cells and human iPS cells. Therefore rBC2LCN is reported as a marker of hPSCs.

180-02991 OW BC2LCN-FITC ALecS1-FITC 1802LCN-FITC

t CTH2000

- rBC2LCN-FITC
- rBC2LCN-547
- rBC2LCN-635
- rBC2LCN Stripping Solution





Capable of staining hPSCs just by adding to culture medium

Capable of staining hPSCs without the cell fixation clearly

Culture hPSCs in the state which were stained with rBC2LCN because of low cytotoxicity

Applicable to cell stain and flow cytometry

Capable of stripping rBC2LCN from stained hPSCs

rBC2LCN-FITC/-635

Live cell stain of human iPS cells (Live Cell Imaging)

Stained human iPS cells (hiPSCs) (201B7 strain) with rBC2LCN, Tra-1-60 and Tra-1-81.



Stain of human iPS cells with cell fixation

After fixing of hiPSCs (201B7 strain) by paraformaldehyde, stained with rBC2LCN, Oct3/4 and DAPI.



Live cell stain of human ES cells(Live Cell Imaging)

Stained human ES cells (WA01 strain) with rBC2LCN-635.

<above> ES cells maintain their undifferentiated state. All cells are stained with rBC2LCN-635. <below> There are differentiated cells. They are stained with Hoechst33342, but not stained with rBC2LCN-635.



ES cells without differentiated population

ES cells with differentiated population

Cytotoxicity to human iPS cells

hiPSCs (201B7 strain) is cultured in medium which contains rBC2LCN-FITC of 1/1,000, 1/100 and 1/50 quantity of culture medium. At the any concentration, hiPSCs are increased equally.



Separation of human iPS cells by Flow Cytometry

hiPSCs (201B7 strain) and human diploid fibroblast are stained by rBC2LCN-FITC, analyzed with flow cytometry. As a result, we can separate undifferentiated hiPSCs and differentiated human diploid fibroblast. (Working dilution 1:1,000)



References

- Onuma, Y., et al.: Biochem. Biophys. Res. Commun., 431, 524 (2013).
- Tateno, H., *et al*.: *Stem Cells Transl. Med.*, **2**, 265 (2013).
- Tateno, H., *et al*.: *Sci .Rep*., **4**, 4069 (2014).

Code No.	Product Name	Grade	Package
029-18061 025-18063	BC2LCN [AiLecS1], Lectin, recombinant, Solution unlabelled BC2LCN	for Glycobiology	1mg 1mg × 5
180-02991 186-02993	rBC2LCN-FITC 【AiLecS1-FITC】 Excitation 495nm, Emission 520nm	for Cell Staining	100μL 100μL × 5
186-03211 182-03213	rBC2LCN-547 【AiLecS1-547】 labelled with yellow fluorescence dye, similar to Cy3 Excitation 551nm, Emission 565nm	for Cell Staining	100µL 100µL × 5
185-03161 181-03163	rBC2LCN-635 【AiLecS1-635】 labelled with red fluorescence dye, similar to Cy5 Excitation 634nm, Emission 654nm	for Cell Staining	100µL 100µL × 5

rBC2LCN Stripping Solution

rBC2LCN Stripping Solution strips the rBC2LCN which was combined with the sugar chain exists on the cell membrane surface of hPSCs. After stripped rBC2LCN, you can stain hPSCs with other antibody and continue culture hPSCs.

Stripping of rBC2LCN-FITC which was combined with hiPSCs surface

Add rBC2LCN-FITC of 1/100 amount of culture medium to culture medium of hiPSCs (201B7 strain), incubate for 35 minutes. After removing culture medium, add rBC2LCN stripping solution and incubate for 30 minutes.

35 minutes later of addition of rBC2LCN-FITC 30 minutes later of addition of rBC2LCN stripping solution



Code No.	Product Name	Grade	Package
182-03171	rBC2LCN Stripping Solution	for Cell Culture	10mL

Related products

Code No.	Product Name	Grade	Package
197-17571 193-17573	StemSure hPSC Medium Δ Serum-free and feeder-free medium for human ES/iPS cells	for Cell Culture	100mL 100ml×4
160-27051	hPSC Dissociation Solution Cell dissociation reagent for human ES/iPS cells	for Cell Culture	100mL
064-05381 068-05384 060-05383	Fibroblast Growth Factor (basic), Human, recombinant, Animal-derived-free 【bFGF/FGF2】	for Cellbiology	50µg 100µg 1mg
030-24021 036-24023 034-24024	CultureSure Y-27632 endotoxin tested, mycoplasma tested	for Cell Culture	1mg 5mg 25mg
03-24591	10mmol/l CultureSure Y-27632 Solution	for Cell Culture	300µL

Listed products are intended for laboratory research use only, and not to be used for drug, food or human use. / Please visit our online catalog to search for other products from Wako; http://www.e-reagent.com / This leaflet may contain products that cannot be exported to your country due to regulations. / Bulk quote requests for some products are welcomed. Please contact us.

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