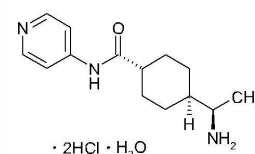


Y-27632

For regenerative medicine research

Y-27632

It is a selective and potent inhibitor of ROCK (Rho-associated coiled-coil forming kinase/Rho binding kinase). Y-27632 has a variety of activities including vascular smooth muscle contraction through the ROCK signaling ($K_i = 140 \text{ nmol/L}$ p160ROCK). This product has been reported to suppress death of human ES cells and human iPS cells at the time of cell dispersion, and also improve viability of the cells after cryopreservation.



CAS No. 331752-47-7
C₁₄H₂₁N₃O • 2HCl • H₂O=338.27

CultureSure® Y-27632



CultureSure® Y-27632 has been tested for bacterial endotoxin and mycoplasma. It is suitable for use in cell culture applications.

# Catalog	Package Size	Grade	Storage Condition
030-24021	1 mg	For Cell Culture	Keep at -20°C
036-24023	5 mg		
034-24024	25 mg		
030-24026	100 mg		

SPECIFICATION

Appearance	: White~pale yellow, crystalline powder~powder
Assay (HPLC)	: min. 98.0%
Solubility in water	: to pass test
Specific rotation $[\alpha]_D^{20}$ (c=0.5, CH ₃ OH)	: + 2 ~ +10°
Mycoplasma test	: to pass test
Bacterial endotoxins	: less than 0.25EU/mg

CultureSure® 10mmol/L Y-27632 Solution, Animal-derived-free



This product is Y-27632 prepared in water at 10 mmol/L. No animal-derived components are used in the process of manufacturing and as a raw material. It has been filter-sterilized and can be added directly to the culture medium.

# Catalog	Package Size	Grade	Storage Condition
039-24591	300 µL	For Cell Culture	Keep at -20°C
035-24593	1 mL		

SPECIFICATION

Composition	: Y-27632 prepared in water at 10 mmol/L
Mycoplasma test	: to pass test
Bacterial endotoxins	: less than 3EU/mL
Sterility test	: to pass test

Y-27632, MF



We have a validation from the production to analysis and manage any changes for consistent, stable and high-quality production.

- Manufactured entirely in Japan, from synthesis to packaging
- No animal-derived materials used

# Catalog	Package Size	Grade	Storage Condition
259-00613	5 mg	For Cell Culture	Keep at -20°C
257-00614	25 mg		

SPECIFICATION

Appearance	: White ~ pale yellow, crystalline powder ~ powder
Assay (HPLC)	: min. 98.0%
Solubility in water	: to pass test
Specific rotation $[\alpha]_D^{20}$ (c=1.0, CH ₃ OH)	: +2.0 ~ +10.0°
Mycoplasma test	: to pass test
Bacterial endotoxins	: less than 0.25EU/mg
Viable count test	: to pass test

Publications using our products

■ CultureSure® Y-27632

Takahashi, K., *et al.* : *Cell Rep. Methods*, **2**, 100155 (2022).
Yamane, J., *et al.* : *iScience*, **25**, 104538 (2022).
- and many more

Scan for the latest
list of publications.



■ CultureSure® 10mmol/L Y-27632 Solution, Animal-derived-free

Hiramatsu, N., *et al.* : *Exp. Ther. Med.*, **24**, 539 (2022).



■ Y-27632, MF

Siriwach, R., *et al.* : *iScience*, **25**, 104130 (2022).
Piantino, M., *et al.* : *Mater. Today Bio*, **14**, 100232 (2022).



Reference

* Publications using our products

■ Improved reprogramming efficiency

Watanabe, K., *et al.* : *Nat. Biotechnol.*, **25**, 681 (2007).
Martin-Ibanez, R., *et al.* : *Hum. Reprod.*, **23**, 2744 (2008).
Kawamata, M., *et al.* : *Proc. Natl. Acad. Sci. USA*, **107**, 14223 (2010).*
Katsuda, T., *et al.* : *Cell Stem Cell*, **20**, 41 (2017).*

■ Improved cell viability after cryopreservation

Claassen, DA., *et al.* : *Mol. Reprod. Dev.*, **76**, 722 (2009).

■ Differentiation Induction

Hu, W., *et al.* : *Cell Stem Cell*, **17**, 204 (2015).
Okoe, H., *et al.* : *Cell Stem Cell*, **22**, 50 (2018).*

■ Spheroid and organoid (3D cell culture)

Ito, H., *et al.* : *Liver Int.*, **32**, 592 (2012).
Lancaster, MA., *et al.* : *Nat. Protoc.*, **9**, 2329 (2014).
Ayabe, H., *et al.* : *Stem Cell Reports.*, **11**, 306 (2018).*
Ogawa, K., *et al.* : *Sci. Rep.*, **8**, 3615 (2018).*



Many other reagents for regenerative medicine research are available.
Please visit our website for details.

https://labchem-wako.fujifilm.com/us/category/cell_culture/stem_cell_culture/index.html

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