

Certificate of Analysis

(Last updated: August 31, 2021)



GPC laboratory
Genome Program and Control

Product Name: THP-G8
Catalog Number: GP-H01-P15
Lot Number: 210406III35/25
Passage Number: 15 passages

TEST	RESULT
• Growth properties	Suspension
• Morphology	Lymphoblast-like
• Test for mycoplasma contamination Real-time PCR (Mycoseq Mycoplasma Detection Assay)	Negative
• Sterility test (BacT/ALERT) iFA Plus Aerobic iFN Plus Anaerobic	Negative Negative
• Cell viability (after freeze-thaw) n=3	94.0±1.4 %

Quality control testing (Refer to OECD TG442E, In vitro skin sensitisation: IL-8 Luc assay)

- For testing, THP-G8 cells are seeded at a density of 5×10^5 cells/mL, and pre-cultured in culture flasks for 96 hours. On the day of the test, cells harvested from the culture flask are washed with RPMI-1640 containing 10% FBS without any antibiotics (B medium), and then, resuspended with B medium at 1×10^6 cells/mL.
- 50 μ l of the test chemical solution is added to 50 μ l of THP-G8 cell suspension (5×10^4 cells) in the wells of a 96-well flat-bottom black plate, and incubated in a CO₂ incubator for 16 hours (37°C, 5% CO₂).
- Luminescence is measured using a 96-well microplate luminometer, Phelios (ATTO, Tokyo, Japan), equipped with optical filters.
- 100 μ l of pre-warmed Tripluc® Luciferase assay reagent is transferred to each well of the plate treated with or without chemical.
- Bioluminescence is measured for 3 sec each in the absence (F0) and presence (F1, 600nm long pass filter) of the optical filter.

Results (Results for the parameters of IL-8 Luc assay for each concentration)

Positive control: 4-NBB (4-nitrobenzyl bromide)

Negative control: LA (lactic acid)

(n=4, mean±SD)

Dilution rate (Chemical concentration)	4-NBB Supernatant				LA			
	0	× 1/32	× 1/16	× 1/8	0 (0 mg/mL)	1/40 (0.5 mg/mL)	1/20 (1 mg/mL)	1/10 (2 mg/mL)
IL8LA	2,276±165	10,057±1,535	15,813±1,123	4,949±1,824	2,594±300	2,521±150	2,151±229	1,844±235
GAPLA	3,549±57	3,396±125	3,686±156	1,859±245	3,552±243	3,691±269	3,527±138	3,754±194
nIL8LA	0.642±0.05	2.976±0.55	4.292±0.28	2.614±0.68	0.737±0.13	0.687±0.08	0.612±0.09	0.494±0.09
Inh-GAPLA	1.000±0.02	0.957±0.04	1.038±0.04	0.524±0.07	1.000±0.07	1.039±0.08	0.993±0.04	1.057±0.06
Ind-IL8LA	1.000±0.83	4.637±0.86	6.687±0.43	4.072±1.06	1.000±0.18	0.933±0.11	0.831±0.12	0.671±0.12

© 2021 GPCL

GPC Laboratory Co. Ltd., #314 Tottori Bio-Frontier, 86 Nishi-cho, Yonago, Tottori 683-826 Japan
www.gpc-lab.co.jp, Phone +81 859 21 7232, E-mail info@gpc-lab.co.jp