

THP-1 | 300356

THP-1

Description	THP1, also known as THP-1, is a human monocytic cell line derived from a patient with acute myeloid leukemia. It is a continuous cell line that can be grown in suspension or adherent culture. THP-1 cells are characterized by their morphology, which is similar to monocytes, and their ability to differentiate into macrophages and dendritic cells. THP-1 cells are commonly used in research to study the biology of monocytes and macrophages, as well as to investigate the mechanisms of disease and the effects of various treatments. THP-1 cells are also used in the development of new drugs and therapies for various diseases, including cancer and autoimmune disorders.
Organism	Human
Tissue	Monocytes
Disease	Acute myeloid leukemia
Applications	THP1 cells are used in research to study the biology of monocytes and macrophages, as well as to investigate the mechanisms of disease and the effects of various treatments. THP1 cells are also used in the development of new drugs and therapies for various diseases, including cancer and autoimmune disorders.
Synonyms	THP1, THP 1, THPI, O-THP-1, THP-1, THP-1, THP-1
Age	1-2 years
Gender	Male
Morphology	Monocytic
Cell type	Monocytes
Growth properties	THP1 cells are grown in suspension or adherent culture. They are characterized by their morphology, which is similar to monocytes, and their ability to differentiate into macrophages and dendritic cells. THP1 cells are commonly used in research to study the biology of monocytes and macrophages, as well as to investigate the mechanisms of disease and the effects of various treatments. THP1 cells are also used in the development of new drugs and therapies for various diseases, including cancer and autoimmune disorders.
Citation	THP-1 (THP-1) Cytion 300356
Biosafety level	1

Product sheet

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NCBI_TaxID 9606

CellosaurusAccession CVCL_0006

HEP-2, HEP-2, HEP-2

Receptors expressed HLA: HLA-A2, -A9, -B5, -DRw1, -DRw2Fc, C3b

Isoenzymes THP-1 CD4, CCR5 CxCR4, HIV. HIV, HIV

Products

Karyotype THP-1

HEP-2

Culture Medium RPMI 1640, w: 2.0 mM NaHCO3 (Cytion 820700a)

Supplements 10% FBS

Doubling time THP-1 19-50

Subculturing 5

Seeding density 0.5 x 10⁶ cells/cm²

Fluid renewal 2-3 times

Freeze medium FBS + 10% DMSO

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Thawing and
Culturing Cells

1. 将细胞冻存管放入 37°C 水浴中快速解冻，然后将细胞悬液转移到含有 1 mL 完全培养基的离心管中，离心（500g，5 分钟），弃去上清液。
2. 将细胞重悬于完全培养基中，接种到含有 10 mL 完全培养基的 T25 培养瓶中，在 37°C、5% CO₂ 条件下培养。
3. 待细胞贴壁后，将细胞悬液转移到含有 10 mL 完全培养基的 T75 培养瓶中，在 37°C、5% CO₂ 条件下培养。
4. 当细胞密度达到 70% 左右时，进行传代培养。
5. 将细胞悬液转移到含有 15 mL 完全培养基的 T75 培养瓶中，在 37°C、5% CO₂ 条件下培养。
6. 当细胞密度达到 70% 左右时，进行传代培养。
7. 将细胞悬液转移到含有 10 mL 完全培养基的 T25 培养瓶中，在 37°C、5% CO₂ 条件下培养。
8. 当细胞密度达到 70% 左右时，进行传代培养。

Incubation
Atmosphere

37°C, 5% CO₂, 饱和湿度

Flask Coating

无需涂布

Freezing
Procedure

将细胞悬液转移到含有 1 mL 完全培养基的冻存管中，加入 10% 冻存液，在 -80°C 条件下冻存。

Shipping
Conditions

将细胞冻存管放入干冰中，在 -80°C 条件下运输。

Storage
Conditions

将细胞冻存管放入 -150°C 液氮中，在 196 K 条件下长期保存。

THP-1 细胞系鉴定

Sterility

THP-1 细胞系经 PCR 检测，未发现支原体污染。细胞在完全培养基中培养，未见细菌、真菌等污染。

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HLA	A*: 02:01:01
	B*: 15:11:01
	C*: 03:03:01
	DRB1*: '01:01:01, '15:01:01
	DQA1*: '01:01:01, '01:02:01
	DQB1*: '05:01:01, '06:02:01
	DPB1*: '02:01:02G, '04:02:01G
	E: 01:03:02