



SZABO SCANDIC

Part of Europa Biosite

Produktinformation



Forschungsprodukte & Biochemikalien



Zellkultur & Verbrauchsmaterial



Diagnostik & molekulare Diagnostik



Laborgeräte & Service

Weitere Information auf den folgenden Seiten!
See the following pages for more information!



Lieferung & Zahlungsart

siehe unsere [Liefer- und Versandbedingungen](#)

Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

SZABO-SCANDIC HandelsgmbH

Quellenstraße 110, A-1100 Wien

T. +43(0)1 489 3961-0

F. +43(0)1 489 3961-7

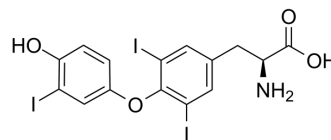
mail@szabo-scandic.com

www.szabo-scandic.com

[linkedin.com/company/szaboscandic](https://www.linkedin.com/company/szaboscandic) 

Liothyronine (GMP)

Cat. No.:	HY-A0070AG
CAS No.:	6893-02-3
Molecular Formula:	C ₁₅ H ₁₂ I ₃ NO ₄
Molecular Weight:	650.97
Target:	Thyroid Hormone Receptor
Pathway:	Vitamin D Related/Nuclear Receptor
Storage:	4°C, sealed storage, away from moisture and light



BIOLOGICAL ACTIVITY

Description	Liothyronine (Triiodothyronine) (GMP) is the Liothyronine (HY-A0070A) produced by using GMP guidelines. GMP small molecules work appropriately as an auxiliary reagent for cell therapy manufacture. Liothyronine is a potent thyroid hormone receptors TR α and TR β agonist with K _s of 2.33 nM for hTR α and hTR β , respectively ^[1] .
IC₅₀ & Target	TR β ^{[1][2]}
In Vitro	<p>Liothyronine (GMP) can be used in culture medium for generation of induced pluripotent stem cells from human keratinocytes^[1].</p> <p>Liothyronine (GMP) is necessary in limbal stem cells (LSCs) proliferation and self-renewal^[2].</p> <p>Liothyronine (GMP) (4 nM) promotes cardiac differentiation and maturation of embryonic stem cells^[3].</p> <p>Liothyronine (GMP) (100 Nm, 14 days) promotes electrophysiological maturation of human-induced pluripotent stem cell (hiPSC)-derived cardiomyocytes^[4].</p> <p>MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p>

REFERENCES

- [1]. Aasen T, et al. Isolation and cultivation of human keratinocytes from skin or plucked hair for the generation of induced pluripotent stem cells. *Nat Protoc.* 2010 Feb;5(2):371-82.
- [2]. Yu M, et al. An important role for adenine, cholera toxin, hydrocortisone and triiodothyronine in the proliferation, self-renewal and differentiation of limbal stem cells in vitro. *Exp Eye Res.* 2016 Nov;152:113-122.
- [3]. CY, et al. Triiodothyronine promotes cardiac differentiation and maturation of embryonic stem cells via the classical genomic pathway. *Mol Endocrinol.* 2010 Sep;24(9):1728-36.
- [4]. Wang L, et al. Triiodothyronine and dexamethasone alter potassium channel expression and promote electrophysiological maturation of human-induced pluripotent stem cell-derived cardiomyocytes. *J Mol Cell Cardiol.* 2021 Dec;161:130-138.

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA