

## 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 <u>mail@szabo-scandic.com</u> www.szabo-scandic.com

# **PRODUCT** INFORMATION



**Betamethasone 17-valerate** 

Item No. 25640

2152-44-5	
9-fluoro-11β,21-dihydroxy-16β-	0
methyl-17-[(1-oxopentyl)oxy]-	ОН
pregna-1,4-diene-3,20-dione	HO
C <sub>27</sub> H <sub>37</sub> FO <sub>6</sub>	
476.6	н Н
≥98%	
λ <sub>max</sub> : 240 nm	F Ĥ
A crystalline solid	
-20°C	• • •
≥2 years	
	9-fluoro-11 $\beta$ ,21-dihydroxy-16 $\beta$ - methyl-17-[(1-oxopentyl)oxy]- pregna-1,4-diene-3,20-dione C <sub>27</sub> H <sub>37</sub> FO <sub>6</sub> 476.6 ≥98% $\lambda_{max}$ : 240 nm A crystalline solid -20°C

Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

#### Laboratory Procedures

Betamethasone 17-valerate is supplied as a crystalline solid. A stock solution may be made by dissolving the betamethasone 17-valerate in the solvent of choice. Betamethasone 17-valerate is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide, which should be purged with an inert gas. The solubility of betamethasone 17-valerate in these solvents is approximately 3, 30, and 25 mg/ml, respectively.

Betamethasone 17-valerate is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, betamethasone 17-valerate should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. Betamethasone 17-valerate has a solubility of approximately 0.1 mg/ml in a 1:10 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

#### Description

Betamethasone 17-valerate is a glucocorticoid with anti-inflammatory activity.<sup>1,2</sup> It inhibits the binding of the radiolabeled glucocorticoid dexamethasone to human epidermis and mouse skin  $(IC_{50}s = 5 \text{ and } 6 \text{ nM}, \text{ respectively}).^1$  Topical application of betamethasone 17-valerate ointment (0.12%) blocks increases in ear weight in a rat model of ear edema induced by croton oil.<sup>2</sup> Formulations containing betamethasone 17-valerate have been used in the treatment of corticosteroid-responsive dermatoses of the scalp.

#### References

- 1. Epstein, E.H., Jr. and Bonifas, J.M. Glucocorticoid receptors of normal human epidermis. J. Invest. Dermatol. 78(2), 144-146 (1982).
- 2. lizuka, Y., Endo, Y., and Misawa, Y. Two simple methods for the evaluation of topically active anti-inflammatory steroidal ointments. Agents Actions 11(3), 254-259 (1981).

WARNING THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

#### SAFFTY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

#### WARRANTY AND LIMITATION OF REMEDY

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 10/11/2018

#### CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD ANN ARBOR, MI 48108 · USA PHONE: [800] 364-9897 [734] 971-3335 FAX: [734] 971-3640 CUSTSERV@CAYMANCHEM.COM WWW.CAYMANCHEM.COM