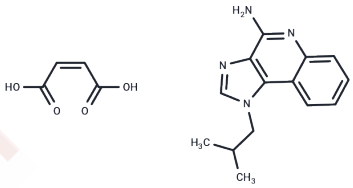
Data Sheet (Cat.No.T22862)

TargetMol

Imiquimod maleate

Chemical Properties



CAS No. : 896106-16-4

Formula: C18H20N4O4

Molecular Weight: 356.38

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year
Actual storage temperature shall be subject to the COA.

Biological Description

Description	Imiquimod maleate (R 837 maleate) is a toll-like receptor 7 (TLR7) agonist and immune response modifier with antiviral and antitumor activities. It is used in the study of external genital warts, perianal warts, cancer, and COVID-19, and can induce psoriasis-like skin lesions in mice, commonly used to establish psoriasis models.
Targets(IC50)	Autophagy,HSV,SARS-CoV,TLR
In vivo	In animal models, Imiquimod maleate stimulates the innate immune response by increasing NK cell activity, activating macrophages to secrete cytokines and nitric oxide, including interferon-a (IFN-α), interleukin (IL)-6, and tumour necrosis factor (TNF)-α, and inducing proliferation and differentiation of B lymphocytes. [1]

Solubility Information

Solubility	H2O: 1 mg/mL (2.81 mM),Sonication is recommended. DMSO: 20 mg/mL (56.12 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.806 mL	14.030 mL	28.0599 mL
5 mM	0.5612 mL	2.806 mL	5.612 mL
10 mM	0.2806 mL	1.403 mL	2.806 mL
50 mM	0.0561 mL	0.2806 mL	0.5612 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

Angelopoulou A, et al. Imiquimod - A toll like receptor 7 agonist - Is an ideal option for management of COVID 19. Environ Res. 2020 Sep;188:109858.

Gupta AK, et al. Imiquimod: a review. J Cutan Med Surg. 2002 Nov-Dec;6(6):554-60.

Kan Y, et al. Imiquimod suppresses propagation of herpes simplex virus 1 by upregulation of cystatin A via the adenosine receptor A1 pathway. J Virol. 2012 Oct;86(19):10338-46.

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