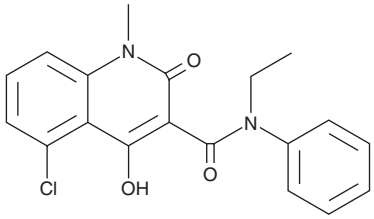
PRODUCT INFORMATION

Laquinimod

Item No. 24187

CAS Registry No.:	248281-84-7
Formal Name:	5-chloro-N-ethyl-1,2-dihydro-4-hydroxy-1-methyl-2-oxo-N-phenyl-3-quinolinecarboxamide
Synonym:	ABR-215062
MF:	$C_{19}H_{17}ClN_2O_3$
FW:	356.8
Purity:	≥98%
UV/Vis.:	λ_{max}: 205, 239, 303 nm
Supplied as:	A crystalline solid
Storage:	-20°C
Stability:	≥4 years



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

Laboratory Procedures

Laquinimod is supplied as a crystalline solid. A stock solution may be made by dissolving the laquinimod in the solvent of choice, which should be purged with an inert gas. Laquinimod is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of laquinimod in these solvents is approximately 2, 10, and 20 mg/ml, respectively.

Description

Laquinimod is an orally bioavailable immunomodulator.[1] It induces expression of genes related to antigen presentation and inflammatory pathways in human peripheral blood mononuclear cells (PBMCs) when used at a concentration of 0.1 µM.[2] In a mouse model of acute autoimmune encephalomyelitis (aEAE), laquinimod (5 mg/kg per day) decreases the severity of symptoms by 91.4%, and it decreases the number of relapses in a mouse model of chronic EAE (crEAE).[1] It decreases T cell and macrophage density and demyelination in the spinal cord of EAE mice compared to non-treated controls when administered at a dose of 5 mg/kg per day.[3] Laquinimod (12.5 and 25 mg/kg per day) decreases inflammatory lesions and demyelination in the sciatic nerve in a rat model of experimental autoimmune neuritis (EAN).[4] Laquinimod (25 mg/kg per day) activates gene expression in the aryl hydrocarbon receptor (AhR) pathway in splenocytes from EAE mice with no effect in AhR knockout mice.[5]

References

1. Brunmark, C., Runström, A., Ohlsson, L.S., *et al. J. Neuroimmunol.* **130(1-2)**, 163-172 (2002).
2. Gurevich, M., Gritzman, T., Orbach, R., *et al. J. Neuroimmunol.* **221(1-2)**, 87-94 (2010).
3. Wegner, C.D., Stadelmann, C., Pförtner, R., *et al. J. Neuroimmunol.* **227(1-2)**, 133-143 (2010).
4. Pitarokoili, K., Ambrosius, B., Schrewe, L., *et al. J. Neuroimmunol.* **274(1-2)**, 38-45 (2014).
5. Kaye, J., Piryatinsky, V., Birnberg, T., *et al. Proc. Nat. Acad. Sci. USA* **113(41)**, E6145-E6152 (2016).

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