Print Date: Aug 12th 2021

Certificate of Analysis

www.tocris.com

Product Name: **RO 8191** **Catalog No.: 7375** **Batch No.: 1**

CAS Number: 691868-88-9

IUPAC Name: 8-(1,3,4-Oxadiazol-2-yl)-2,4-bis(trifluoromethyl)imidazo[1,2-*a*][1,8]naphthyridine

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: $C_{14}H_5F_6N_5O$

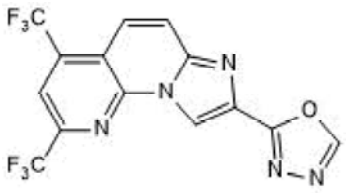
Batch Molecular Weight: 373.22

Physical Appearance: Pale yellow solid

Solubility: DMSO to 5 mM

Storage: Store at -20°C

Batch Molecular Structure:



2. ANALYTICAL DATA

HPLC: Shows 98.5% purity

^{1}H NMR: Consistent with structure

Mass Spectrum: Consistent with structure

Microanalysis:

	Carbon	Hydrogen	Nitrogen
Theoretical	45.06	1.35	18.77
Found	45.53	1.71	18.74

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use

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Description:

RO 8191 is an IFNα receptor 2 (IFNAR2) agonist (EC_{50} = 0.2 μM). RO 8191 induces phosphorylation and activation of STAT1 and STAT2. RO 8191 inhibits hepatitis C (HCV) cell culture-produced infectious particles and HCV subgenomic replicon (IC_{50} values 0.20 μM and 0.17 μM, respectively) and inhibits hepatitis B virus replication in cell cultures (IC_{50} = 0.1 μM). In an animal model RO 8191 inhibits prion invasion and prolongs survival; it also reverses the inhibitory effect of integrin β6 (ITGB6) on the JAK/STAT3 signaling and the epithelial-to-mesenchymal transition pathway and inhibits the proliferation, invasion, ... Please see product specific page on www.tocris.com for full description.

Physical and Chemical Properties:

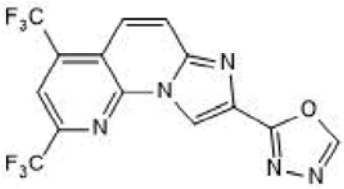
Batch Molecular Formula: $C_{14}H_5F_6N_5O$

Batch Molecular Weight: 373.22

Physical Appearance: Pale yellow solid

Minimum Purity: ≥98%

Batch Molecular Structure:



Storage: Store at -20°C

Solubility & Usage Info:

DMSO to 5 mM

Stability and Solubility Advice:

Some solutions can be difficult to obtain and can be encouraged by rapid stirring, sonication or gentle warming (in a 45-60°C water bath).

Information concerning product stability, particularly in solution, has rarely been reported and in most cases we can only offer a general guide. Our standard recommendations are:

SOLIDS: Provided storage is as stated on the product label and the vial is kept tightly sealed, the product can be stored for up to 6 months from date of receipt.

SOLUTIONS: We recommend that stock solutions, once prepared, are stored aliquoted in tightly sealed vials at -20°C or below and used within 1 month. Wherever possible solutions should be made up and used on the same day.

References:

Zheng *et al* (2021) Silencing of ITGB6 inhibits the progression of cervical carcinoma via regulating JAK/STAT3 signaling pathway. Ann.Transl.Med. ***9***. PMID: 34268416.

Furutani *et al* (2019) An interferon-like small chemical compound CDM-3008 suppresses hepatitis B virus through induction of interferon-stimulated genes. PLoS One ***14***. PMID: 31188831.

Ishibashi *et al* (2019) Type I interferon protects neurons from prions in in vivo models. Brain ***142***. PMID: 30753318.