

Doramapimod (BIRB796)

Catalog No: tcsc0219



Available Sizes

Size: 10mg

Size: 50mg

Size: 100mg

Size: 200mg

Size: 500mg

Size: 1g



Specifications

CAS No:

285983-48-4

Formula:

$C_{31}H_{37}N_5O_3$

Pathway:

MAPK/ERK Pathway; MAPK/ERK Pathway

Target:

p38 MAPK; Raf

Purity / Grade:

>98%

Solubility:

DMSO : ≥ 100 mg/mL (189.52 mM); H₂O :

Alternative Names:

BIRB 796

Observed Molecular Weight:

527.66

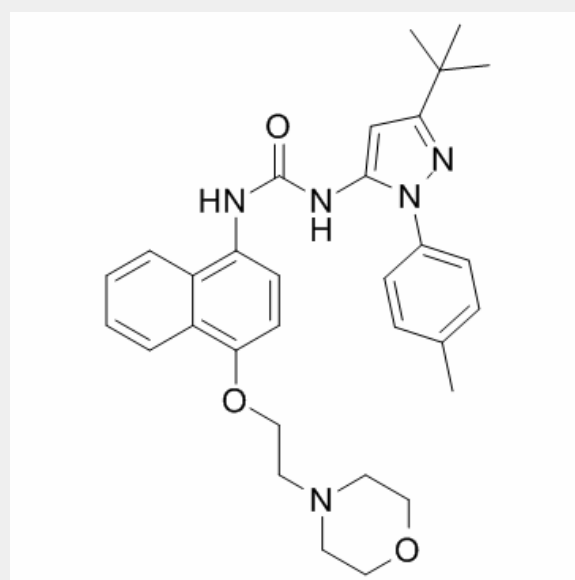
Product Description

Doramapimod is a highly potent **p38α** inhibitor with an **IC₅₀** of 4 nM, also inhibits **B-Raf** with an **IC₅₀** of 83 nM and Abl with an **IC₅₀** of 14.6 μM.

IC50 & Target: IC50: 4 nM (p38α), 83 nM (B-Raf)^[1]

In Vitro: Doramapimod (BIRB 796) is a highly potent inhibitor of p38α, a serine/threonine mitogen activated protein kinase (MAPK) that is usually associated with inflammation because of its role in T-cell proliferation and cytokine production^[1]. Doramapimod (BIRB 796) is a picomolar inhibitor of human p38 MAP kinase^[2]. HEK293 cells are incubated with different concentrations of Doramapimod (BIRB 796) for 30 min or 2 h prior to stimulation with sorbitol (an osmotic shock) and examined the activation of MAPKAP-K2 by measuring its activity. MAPKAP-K2 activation is inhibited in these cells in a time-dependent manner with an apparent **IC₅₀** of 30 nM after 30 min or 8 nM after 2 h of preincubation with Doramapimod^[3].

In Vivo: The mean xenograft weigh of Doramapimod (BIRB 796) plus Paclitaxel group (1.14±0.48 g) is lighter than control, Doramapimod or Paclitaxel group (1.84±0.61, 1.80±0.62 and 1.65±0.29 g) (P[4]. The Doramapimod (BIRB 796) treatment slightly reduces blood pressure (166±7 mm Hg at week 7; P[5].



All products are for RESEARCH USE ONLY. Not for diagnostic & therapeutic purposes!