

# Iguratimod

**Catalog No: tcsc0617**



## Available Sizes

**Size:** 5mg

**Size:** 10mg

**Size:** 50mg



## Specifications

**CAS No:**

123663-49-0

**Formula:**

$C_{17}H_{14}N_2O_6S$

**Pathway:**

Immunology/Inflammation

**Target:**

COX

**Purity / Grade:**

>98%

**Solubility:**

10 mM in DMSO

**Alternative Names:**

T614

**Observed Molecular Weight:**

374.37

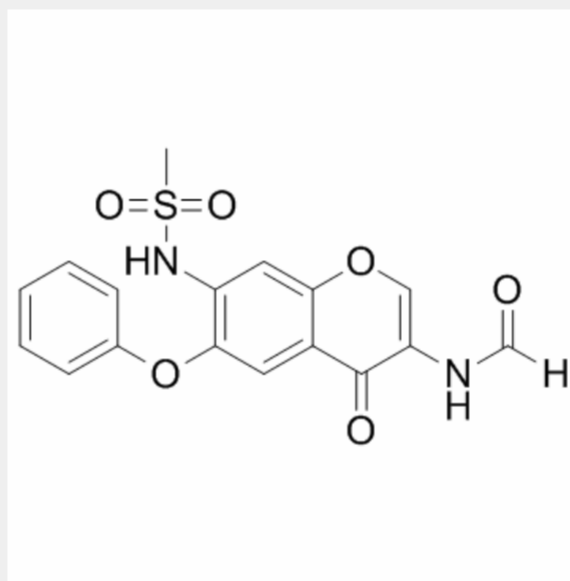
## Product Description

Iguratimod is an antirheumatic agent, acts as an inhibitor of **COX-2**, with an **IC<sub>50</sub>** of 20 μM (7.7 μg/mL), but shows no effect on COX-1. Iguratimod also inhibits macrophage migration inhibitory factor (**MIF**) with an **IC<sub>50</sub>** of 6.81 μM.

IC50 & Target: IC50: 20 μM (COX-2)<sup>[1]</sup>, 6.81 μM (MIF)<sup>[3]</sup>

**In Vitro:** Iguratimod (T-614) is an antirheumatic agent, acts as an inhibitor of COX-2, with an IC<sub>50</sub> of 20 μM (7.7 μg/mL), but shows no effect on COX-1. Iguratimod (0.1, 1, 10 μg/mL) inhibits bradykinin-stimulated PGE2 release from fibroblasts. Iguratimod suppresses the COX activity from bradykinin stimulated fibroblasts in a concentration-dependent manner, with an IC<sub>50</sub> of 48 μg/mL. Iguratimod (10 and 30 μg/mL) also dose-dependently inhibits COX-2 mRNA levels<sup>[1]</sup>. In addition, Iguratimod potently inhibits macrophage migration inhibitory factor (MIF) with an IC<sub>50</sub> of 6.81 μM. Iguratimod is synergetic with glucocorticoids in vitro<sup>[3]</sup>.

**In Vivo:** Iguratimod (5 or 20 mg/kg) shows analgesic effect, significantly improves the pain withdrawal threshold of the left hind paw in dose-dependent manner in rats. Iguratimod (5 or 20 mg/kg) reduces the elevation of pERK1/2 and c-Fos in the spinal cord induced by cancer cell inoculation. Iguratimod also dose-dependently decreases the IL-6 levels in rats. In Iguratimod-treated rats, the activity of osteoclasts is weaker than the control group<sup>[2]</sup>. Iguratimod (20 mg/kg i.p.) shows significantly increased survival in BALB/c mice that are vulnerable to endotoxemia, and attenuates TNFα release measured in serum isolated 90 min post-LPS administration in wild-type C57BL/6 mice<sup>[3]</sup>.



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