Web: www.taiclone.com
Tel: +886-2-2735-9682
Email: order@taiclone.com

Teriflunomide

Catalog No: tcsc1031

Available Sizes

Size: 10mg

Size: 50mg

Size: 100mg

Size: 500mg

Specifications

CAS No:
163451-81-8

Formula:
$C_{12}H_9F_3N_2O_2$

Pathway:
Others

Target:
Others

Purity / Grade:
>98%

Solubility:
DMSO : 26 mg/mL (96.22 mM; Need ultrasonic and warming)

Alternative Names:
A 77-1726

Observed Molecular Weight:
270.21

Web: www.taiclone.com
Tel: +886-2-2735-9682
Email: order@taiclone.com

Product Description

Teriflunomide is the active metabolite of leflunomide, which inhibits pyrimidine de novo synthesis by blocking the enzyme dihydroorotate dehydrogenase, used as an immunomodulatory agent.

In Vitro: Teriflunomide primarily acts as an inhibitor of dihydroorotate dehydrogenase (DHODH), a key mitochondrial enzyme involved in the de novo synthesis of pyrimidines in rapidly proliferating cells. By reducing the activity of high-avidity proliferating T lymphocytes and B lymphocytes, teriflunomide likely attenuates the inflammatory response to autoantigens in MS. Thus, teriflunomide can be considered a cytostatic rather than a cytotoxic drug to leukocytes[1].

In Vivo: Teriflunomide has demonstrated beneficial effects in two independent animal models of demyelinating disease. In the dark agouti rat model of experimental autoimmune encephalitis (EAE), teriflunomide administration results in clinical, histopathological, and electrophysiological evidence of efficacy both as a prophylactic and therapeutic agent. Similarly, in the female Lewis rat model of EAE, teriflunomide administration results in beneficial prophylactic and therapeutic clinical effects, with a delay in disease onset and symptom severity[1].