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

Ki20227

Catalog No: tcsc0260

Available Sizes

Size: 2mg

Size: 5mg

Size: 10mg

Size: 50mg

Specifications

CAS No:
623142-96-1

Formula:
$C_{24}H_{24}N_4O_5S$

Pathway:
Protein Tyrosine Kinase/RTK

Target:
c-Fms

Purity / Grade:
>98%

Solubility:
DMSO : 7.2 mg/mL (14.98 mM; Need ultrasonic and warming)

Observed Molecular Weight:
480.54

Product Description

Ki-20227 is a highly selective c-Fms tyrosine kinase(CSF1R) inhibitor with IC50 value of 2 nM; 6 fold and > 100 fold selectivity over

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

VEGFR2(IC50=12 nM) and c-Kit/PDGFRβ(IC50=451/217 nM), respectively.

IC50 value:

Target: CSF1R

in vitro: Ki20227 did not inhibit other kinases tested, such as fms-like tyrosine kinase-3, epidermal growth factor receptor, or c-Src (c-src proto-oncogene product). Ki20227 was also found to inhibit the M-CSF-dependent growth of M-NFS-60 cells but not the M-CSF-independent growth of A375 human melanoma cells in vitro [1]. Ki20227 inhibited M-CSF-dependent reactions, such as lipopolysaccharide-induced tumor necrosis factor-alpha production, which were enhanced by M-CSF in vitro [2].

in vivo: Ki20227 decreased the number of tartrate-resistant acid phosphatase-positive osteoclast-like cells on bone surfaces in ovariectomized (ovx) rats [1]. In addition, the number of CD11b(+), Gr-1(+), and Ly-6G(+) cells in the spleen decreased in the Ki20227-treated mice, and the CII-induced cytokine production in splenocytes isolated from the Ki20227-treated arthritic mice was also reduced [2]. Ki20227 treatments inhibited the turn-over/expansion of myeloid cells provoked by the immunization and subsequent MOG-specific T cell responses in our EAE animal model [3].