Product Name: Ki20227
Catalog Number: T4315
CAS Number: 623142-96-1
Molecular Formula: C24H24N4O5S
Molecular Weight: 480.54

Description: Ki-20227 is a specific c-Fms tyrosine kinase (CSF1R) inhibitor (IC50: 2 nM). It also has certain inhibitory against VEGFR2 (IC50: 12 nM) and c-Kit/PDGFRβ (IC50: 451/217 nM), respectively.

Storage: 2 years -80°C in solvent; 3 years -20°C powder;

Solubility

<table>
<thead>
<tr>
<th>Solvent</th>
<th>Solubility</th>
</tr>
</thead>
<tbody>
<tr>
<td>DMSO</td>
<td>7.2 mg/mL</td>
</tr>
</tbody>
</table>

(< 1 mg/ml refers to the product slightly soluble or insoluble)

Receptor (IC50)

CSF-1R, VEGFR2

In vitro Activity

in vivo: Ki20227 decreased the number of tartrate-resistant acid phosphatase-positive osteoclast-like cells on bone surfaces in ovariectomized (ovx) rats. In addition, the number of CD11b(+), Gr-1(+), and Ly-6G(+) cells in the spleen decreased in the Ki20227-treated mice, and the CI-induced cytokine production in splenocytes isolated from the Ki20227-treated arthritic mice was also reduced. 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.

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. Ki20227 inhibited M-CSF-dependent reactions, such as lipopolysaccharide-induced tumor necrosis factor-alpha production, which were enhanced by M-CSF in vitro.

FOR RESEARCH PURPOSES ONLY. NOT FOR DIAGNOSTIC OR THERAPEUTIC USE.

Information for product storage and handling is indicated on the product datasheet. Targetmol products are stable for long term under the recommended storage conditions. Our products may be shipped under different conditions as many of them are stable in the short-term at higher or even room temperatures. We ensure that the product is shipped under conditions that will maintain the quality of the reagents. Upon receipt of the product, please follow the storage recommendations on the product data sheet.