**Proteins** 

## Immuno modulator-1

Cat. No.: HY-153952 CAS No.: 2757469-20-6 Molecular Formula:  $C_{32}H_{31}FN_{6}O_{4}$ Molecular Weight: 582.62

Target: TNF Receptor; Interleukin Related; Potassium Channel

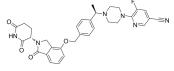
Pathway: Apoptosis; Immunology/Inflammation; Membrane Transporter/Ion Channel

Storage: Please store the product under the recommended conditions in the Certificate of

Analysis.

Animal Model:

Dosage:



**Product** Data Sheet

## **BIOLOGICAL ACTIVITY**

| Description               | Immuno modulator-1 (compound 22) inhibits TNF $\alpha$ and IL-2 secretion in human peripheral blood mononuclear cells (hPBMC), with IC <sub>50</sub> values of 4.7 and 26 nM, respectively. Immuno modulator-1 shows hERG potassium channel blocking effect, with Inhibitory percentage of 20% at 3 $\mu$ M <sup>[1]</sup> . |  |  |  |  |  |
|---------------------------|--|--|--|--|--|--|
| IC <sub>50</sub> & Target | IL-2   |  |  |  |  |  |
| In Vitro                  | Immuno modulator-1 (compound 22) inhibits the proliferation of NCI-H929 human myeloma cell, with an IC <sub>50</sub> of 0.6 nM <sup>[1]</sup> .  MCE has not independently confirmed the accuracy of these methods. They are for reference only.   |  |  |  |  |  |

In Vivo Immuno modulator-1 (compound 22) (1 mg/kg (IV), 5 mg/kg (PO); once) has an oral bioavailability of 30% in Male Sprague-Dawley rats<sup>[1]</sup>.

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Male Sprague-Dawley rats<sup>[1]</sup>

1 mg/kg (IV), 5 mg/kg (PO)

| Administration: | IV (2 mL/kg), PO (10 mL/kg); once (Pharmacokinetic Analysis)                                      |              |              |  |  |  |  |
|-----------------|---|--------------|--------------|--|--|--|--|
| Result:         | Pharmacokinetic Parameters of Immuno modulator-1 in male Sprague-Dawley rats $^{\left[1 ight]}$ . |              |              |  |  |  |  |
|                 |   | IV (1 mg/kg) | PO (5 mg/kg) |  |  |  |  |
|                 | C <sub>max</sub> (ng/mL)  |              | 1437         |  |  |  |  |
|                 | AUC <sub>0-24</sub> (ng/mL⊠h)   |              | 13029        |  |  |  |  |
|                 | CL (mL/min/kg)  | 2.2          |              |  |  |  |  |
|                 | Vss (L/kg)  | 0.36         |              |  |  |  |  |

|  | F (%) |  | 30% |  |
|--|-------|--|-----|--|
|  |       |  |     |  |

|  |  |  |  | C |  |
|--|--|--|--|---|--|
|  |  |  |  |   |  |
|  |  |  |  |   |  |

[1]. Chen Xiangyang, et al. Heterocyclic immunomodulator. Patent, WO2022007659A1.

Caution: Product has not been fully validated for medical applications. For research use only.

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Page 2 of 2 www.MedChemExpress.com