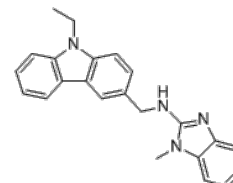


Product Name : AJ2-30
Cat. No. : PC-21683
CAS No. : 2700322-79-6
Molecular Formula : C₂₃H₂₂N₄
Molecular Weight : 354.46
Target : Other Targets
Solubility : 10 mM in DMSO



CAS: 2700322-79-6

Biological Activity

AJ2-30 is a specific small molecule **SLC15A4** inhibitor with IFN- α suppression IC₅₀ of 1.8 μ M and MDP transport inhibition IC₅₀ of 2.6 μ M.

AJ2-30 shows no activity against a related family member, SLC15A3.

AJ2-30 displays similar activity against murine Slc15a4-mediated NOD2 activation.

AJ2-30 also blocks R848-induced activation of TLR7/8 signaling as well as TriDAP-induced and MDP-induced activation of NOD1 and NOD2 signaling, respectively, in THP-1 reporter cells.

AJ2-30 (10 μ M) inhibits TLR7/8-induced production of TNF- α in human monocytes, also suppresses MDP-mediated and TriDAP-mediated TNF- α production in human macrophages, displays cross-species reactivity, suppressing IFN- α production in mouse pDCs.

AJ2-30 suppresses TLR7-9 and NOD activation of mouse immune cells in an Slc15a4-dependent manner.

AJ2-30 induces lysosomal-mediated degradation of SLC15A4.

AJ2-30 reduces inflammation in lupus patient cells and mice, suppresses inflammatory cytokine production in lupus patient-derived PBMCs.

References

Tzu-Yuan Chiu, et al. *Nat Chem Biol*. 2024 Jan 8. doi: 10.1038/s41589-023-01527-8.

Caution: Product has not been fully validated for medical applications. Lab Use Only!

E-mail: tech@probechem.com