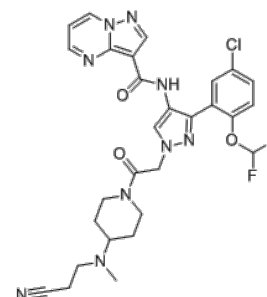


Product Name : iJak-381
Cat. No. : PC-35830
CAS No. : 1831144-46-7
Molecular Formula : C₂₈H₂₈ClF₂N₉O₃
Molecular Weight : 612.039
Target : JAK
Solubility : 10 mM in DMSO



Biological Activity

iJak-381 (iJak381) is a potent, selective inhalable and lung-restricted inhibitor of **JAK1** with IC₅₀ of 8.52 nM, displays 6.3/704/28 fold selectivity over JAK2/JAK3/TYK2.

iJak-381 suppresses STAT 6 activation by IL-1, suppresses ovalbumin-induced lung inflammation in both murine and guinea pig asthma models and improved allergen-induced airway hyperresponsiveness in mice.

In a model driven by human allergens, iJak-381 had a more potent suppressive effect on neutrophil-driven inflammation compared to systemic corticosteroid administration, reduces lung pathology without affecting systemic Jak1 activity in rodents.

References

Dengler HS, et al. *Sci Transl Med.* 2018 Nov 21;10(468). pii: eaao2151. doi: 10.1126/scitranslmed.aao2151.

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

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