## **Product** Data Sheet

## JAK 3i

Cat. No.: HY-100849
CAS No.: 1918238-72-8

Molecular Formula:  $C_{18}H_{15}FN_4O_3$ Molecular Weight: 354.34

Target: JAK

Pathway: Epigenetics; JAK/STAT Signaling; Protein Tyrosine Kinase/RTK; Stem Cell/Wnt

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

Analysis.

## **BIOLOGICAL ACTIVITY**

Description	JAK3i is a highly selective JAK3 inhibitor (IC $_{50}$ : 0.43 nM). JAK3i forms a covalent bond with a cysteine in JAK3, but not the closely related kinase domains in JAK1, JAK2, or TYK2. JAK3i abolishes IL-2-driven T-cell proliferation in vivo and has the potential for autoimmune disease research <sup>[1]</sup> .		
IC <sub>50</sub> & Target	JAK3	JAK2	JAK1
	0.43 nM (IC <sub>50</sub> )	8680 nM (IC <sub>50</sub> )	1520 nM (IC <sub>50</sub> )

## **REFERENCES**

[1]. Geoffrey A Smith, et al. Essential biphasic role for JAK3 catalytic activity in IL-2 receptor signaling. Nat Chem Biol. 2016 May;12(5):373-9.

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

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