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## **Product Datasheet**

## Ritlecitinib, CAS [[1792180-81-4]] FBM-10-4377

Article Name	Ritlecitinib, CAS [[1792180-81-4]]
Biozol Catalog Number	FBM-10-4377
Supplier Catalog Number	10-4377
Alternative Catalog Number	FBM-10-4377-5MG,FBM-10-4377-25MG
Manufacturer	Focus Biomolecules
Category	Biochemikalien
Product Description	JAK3 inhibitor
Molecular Weight	285.35
Purity	>98% by HPLC NMR (Conforms)
Form	White solid
CAS Number	[1792180-81-4]
Formula	C15H19N5O

**Application Notes** 

Ritlecitinib is potent (IC50 = 33 nM) covalent JAK3 inhibitor with exquisite selectivity over other members in its kinase class (JAK1, JAK2, TYK2).1,2 It also displays excellent kinome selectivity against 305 kinases tested. Ritlecitinib inhibits Th1 and Th17 cell differentiation and function and ameliorates symptoms in rat arthritis and mouse autoimmune encephalomyelitis models.2 It selectively targets gammac cytokine pathways while preserving JAK1-dependent anti-inflammatory signaling. Ritlecitinib also displays activity against some TEC family kinases (BTK, BMX, ITK, RLK,TEC) leading to inhibition of the cytolytic function of CD8+ T cells and NK cells.3 Low dose Ritlecitinib significantly improved T-cell responses and decreased tumor load in louse cancer models.4 It significantly prolonged allograft survival in a mouse cardiac transplantation model.