

Baricitinib, Immunosuppressant; JAK1/2 inhibitor

Catalog	Unit
TBI3893-5MG	5 mg
TBI3893-25MG	25 mg

Product Details

Formal Name: 1-(ethylsulfonyl)-3-[4-(7H-pyrrolo[2,3-d]pyrimidin-4-yl)-1H-pyrazol-1-yl]-3-azetidoneacetonitrile

Alternate Names: INCB 028050; LY3009104

Molecular Formula: C₁₆H₁₇N₇O₂S

Formula Weight: 371.4

CAS Number: 1187594-09-7

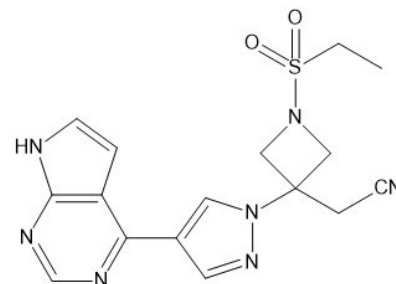
Purity: >95%

Formulation: powder

Solubility: Soluble in DMSO (up to at least 30 mg/ml) or DMF (up to at least 50 mg/ml)

Storage: RT

Stability: ≥ 2 years.



Applications

Immunosuppressant; JAK1/2 inhibitor

Functions

Baricitinib, approved by the FDA for two inflammatory disorders, rheumatoid arthritis and alopecia areata, selectively inhibits Janus kinase 1 (IC₅₀ = 5.9 nM) and 2 (5.7 nM), over 3 (0.56 μM). It thereby blocks JAK/STAT signaling, reducing cytokine release and suppressing the innate and adaptive immune systems. Was recently shown to significantly improve COVID-19 symptoms in a preliminary human trial, presumably through suppression of the cytokine release syndrome (“cytokine storm”) induced by SARS-CoV-2 infection.

Application Procedures

First dissolved in DMSO (up to at least 30 mg/ml) or DMF (up to at least 50 mg/ml), then diluted to aqueous buffer. Solutions in DMSO or DMF may be stored at -20°C for up to 3 months.

For research use only.