

# PRODUCT INFORMATION

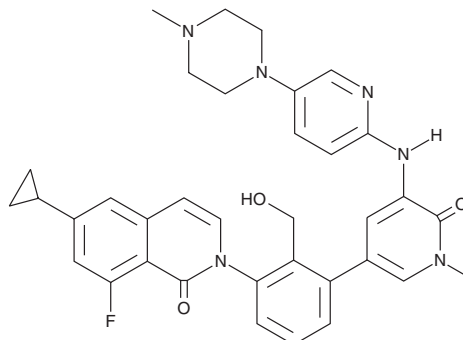


**RN-486**

Item No. 20536

**CAS Registry No.:** 1242156-23-5  
**Formal Name:** 6-cyclopropyl-2-[3-[1,6-dihydro-1-methyl-5-[[5-(4-methyl-1-piperazinyl)-2-pyridinyl]amino]-6-oxo-3-pyridinyl]-2-(hydroxymethyl)phenyl]-8-fluoro-1(2H)-isoquinolinone

**MF:** C<sub>35</sub>H<sub>35</sub>FN<sub>6</sub>O<sub>3</sub>  
**FW:** 606.7  
**Purity:** ≥98%  
**UV/Vis.:** λ<sub>max</sub>: 213, 217, 294, 344 nm  
**Supplied as:** A crystalline solid  
**Storage:** -20°C  
**Stability:** ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

## Laboratory Procedures

RN-486 is supplied as a crystalline solid. A stock solution may be made by dissolving the RN-486 in the solvent of choice, which should be purged with an inert gas. RN-486 is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of RN-486 in these solvents is approximately 0.2 mg/ml.

## Description

RN-486 is a Bruton's tyrosine kinase inhibitor ( $K_d = 0.31$  nM;  $IC_{50} = 4$  nM) that displays a high degree of selectivity when tested against a panel of 369 kinases.<sup>1</sup> It has been shown to block Fcε receptor cross-linking-induced degranulation in mast cells ( $IC_{50} = 2.9$  nM), Fcγ receptor engagement-mediated TNF-α production in monocytes ( $IC_{50} = 7$  nM), and B cell antigen receptor-induced expression of CD69 in B cells whole blood ( $IC_{50} = 21$  nM).<sup>1</sup> RN-486 is reported to produce anti-inflammatory and bone-protective effects in mouse collagen-induced arthritis and rat adjuvant-induced arthritis models.<sup>1</sup>

## Reference

1. Xu, D., Kim, Y., Postelnek, J., *et al.* RN486, a selective Bruton's tyrosine kinase inhibitor, abrogates immune hypersensitivity responses and arthritis in rodents. *J. Pharmacol. Exp. Ther.* **341**(1), 90-103 (2012).

### WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

### SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

### WARRANTY AND LIMITATION OF REMEDY

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