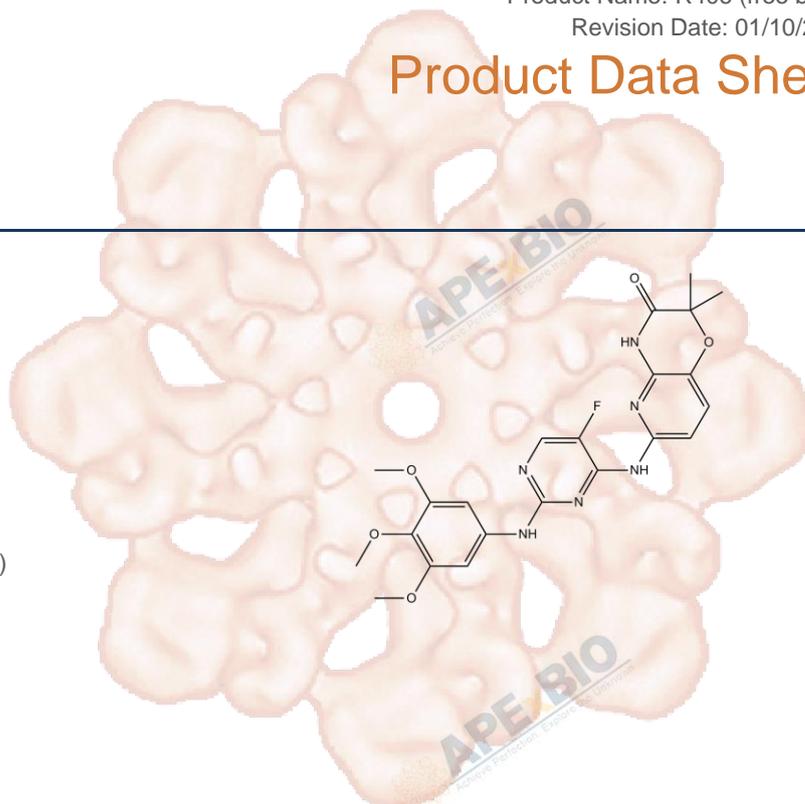


Product Data Sheet

R406 (free base)

Cat. No.:	A5880
CAS No.:	841290-80-0
Formula:	C22H23FN6O5
M.Wt:	470.4
Synonyms:	
Target:	Tyrosine Kinase
Pathway:	Spleen Tyrosine Kinase (Syk)
Storage:	Store at -20°C



Solvent & Solubility

≥23.5 mg/mL in DMSO; insoluble in EtOH; insoluble in H2O

In Vitro

Preparing Stock Solutions	Solvent	Mass		
		1mg	5mg	10mg
	Concentration			
	1 mM	2.1259 mL	10.6293 mL	21.2585 mL
	5 mM	0.4252 mL	2.1259 mL	4.2517 mL
	10 mM	0.2126 mL	1.0629 mL	2.1259 mL

Please refer to the solubility information to select the appropriate solvent.

Biological Activity

Shortsummary

Syk inhibitor

IC₅₀ & Target

41 nM (Syk)

In Vitro

Cell Viability Assay

Cell Line:

human macrophages derived from human monocytes or the monocytic cell line THP-1

Preparation method:

The solubility of this compound in DMSO is >11.75mg/mL. General tips for obtaining a higher concentration: Please warm the tube at 37°C for 10 minutes and/or shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.

	Reacting conditions:	0-10 µM; 16 to 20 h; 37°C
	Applications:	In human macrophages derived from human monocytes or the monocytic cell line THP-1, R406 potently inhibited TNFα production induced by FcγR-cross-linking. Roughly 10-fold higher levels of R406 inhibited TNFα production induced by LPS.
In Vivo	Animal experiment	
	Animal models:	collagen antibody-induced arthritis (CAIA) female Balb/c mice
	Dosage form:	1 and 5 mg/kg; orally b.i.d for 14 days
	Applications:	In collagen antibody-induced arthritis (CAIA) Balb/c mice, R406 reduced the cutaneous reverse passive Arthus reaction by approximately 72 and 86% at 1 and 5 mg/kg, respectively, compared with the vehicle control. R406 could inhibit local inflammatory injury mediated by immune complexes (ICs).
	Other notes:	Please test the solubility of all compounds indoor, and the actual solubility may slightly differ with the theoretical value. This is caused by an experimental system error and it is normal.

Product Citations

See more customer validations on www.apexbt.com.

References

[1]. Braselmann S1, Taylor V, Zhao H, et al. R406, an orally available spleen tyrosine kinase inhibitor blocks fc receptor signaling and reduces immune complex-mediated inflammation. J Pharmacol Exp Ther. 2006 Dec;319(3):998-1008.

Caution

FOR RESEARCH PURPOSES ONLY.

NOT FOR HUMAN, VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

Specific storage and handling information for each product is indicated on the product datasheet. Most APEX BIO products are stable under the recommended conditions. Products are sometimes shipped at a temperature that differs from the recommended storage temperature. Short-term storage of many products are stable in the short-term at temperatures that differ from that required for long-term storage. We ensure that the product is shipped under conditions that will maintain the quality of the reagents. Upon receipt of the product, follow the storage recommendations on the product data sheet.

APEX BIO Technology

www.apexbt.com

7505 Fannin street, Suite 410, Houston, TX 77054.

Tel: +1-832-696-8203 | Fax: +1-832-641-3177 | Email: info@apexbt.com

