

Product data sheet



MedKoo Cat#: 328086 Name: Razaxaban HCl CAS: 405940-76-3 (HCl) Chemical Formula: C ₂₄ H ₂₁ ClF ₄ N ₈ O ₂ Molecular Weight: 564.93		
Product supplied as:	Powder	
Purity (by HPLC):	≥ 98%	
Shipping conditions	Ambient temperature	
Storage conditions:	Powder: -20°C 3 years; 4°C 2 years. In solvent: -80°C 3 months; -20°C 2 weeks.	

Product description:

Razaxaban, also known as BMS-561389; BMS-561389-01; DPC-906; BMS-561389-06, is a factor Xa inhibitor potentially for the treatment of thrombosis. Razaxaban was an effective antithrombotic agent in a rabbit model of arterial thrombosis. Low-dose razaxaban was useful in combination with sub-optimal doses of aspirin and/or clopidogrel for the prevention of occlusive arterial thrombosis without excessive bleeding.

2. CoA, QC data, SDS, and handling instruction

SDS and handling instruction, CoA with copies of QC data (NMR, HPLC and MS analytical spectra) can be downloaded from the product web page under “QC And Documents” section. Note: copies of analytical spectra may not be available if the product is being supplied by MedKoo partners. Whether the product was made by MedKoo or provided by its partners, the quality is 100% guaranteed.

3. Solubility data

Solvent	Max Conc. mg/mL	Max Conc. mM
To be determined	To be determined	To be determined

4. Stock solution preparation table:

Concentration / Solvent Volume / Mass	1 mg	5 mg	10 mg
1 mM	1.77 mL	8.85 mL	17.70 mL
5 mM	0.35 mL	1.77 mL	3.54 mL
10 mM	0.18 mL	0.89 mL	1.77 mL
50 mM	0.04 mL	0.18 mL	0.35 mL

5. Molarity Calculator, Reconstitution Calculator, Dilution Calculator

Please refer the product web page under section of “Calculator”

6. Recommended literature which reported protocols for in vitro and in vivo study

In vitro study

1. Quan ML, Lam PY, Han Q, Pinto DJ, He MY, Li R, Ellis CD, Clark CG, Teleha CA, Sun JH, Alexander RS, Bai S, Luetting JM, Knabb RM, Wong PC, Wexler RR. Discovery of 1-(3'-aminobenzisoxazol-5'-yl)-3-trifluoromethyl-N-[2-fluoro-4-[(2'-dimethylaminomethyl)imidazol-1-yl]phenyl]-1H-pyrazole-5-carboxamide hydrochloride (razaxaban), a highly potent, selective, and orally bioavailable factor Xa inhibitor. *J Med Chem.* 2005 Mar 24;48(6):1729-44. doi: 10.1021/jm0497949. PMID: 15771420.

In vivo study

1. Pugh N, Jarvis GE, Koch A, Sakariassen KS, Davis B, Farndale RW. The impact of factor Xa inhibition on axial dependent arterial thrombus formation triggered by a tissue factor rich surface. *J Thromb Thrombolysis.* 2012 Jan;33(1):6-15. doi: 10.1007/s11239-011-0658-6. PMID: 22120925.
2. Zhang D, Raghavan N, Chen SY, Zhang H, Quan M, Lecureux L, Patrone LM, Lam PY, Bonacorsi SJ, Knabb RM, Skiles GL, He K. Reductive isoxazole ring opening of the anticoagulant razaxaban is the major metabolic clearance pathway in rats and dogs. *Drug Metab Dispos.* 2008 Feb;36(2):303-15. doi: 10.1124/dmd.107.018416. Epub 2007 Nov 5. PMID: 17984286.

7. Bioactivity

Biological target:

Product data sheet



Razaxaban hydrochloride (BMS 561389 hydrochloride) is a highly potent, selective and orally active factor Xa inhibitor with a K_i of 0.19 nM. Razaxaban hydrochloride exhibits excellent selectivity (>5000-fold) for factor Xa over other related serine proteases. Razaxaban hydrochloride is also a potent thrombin inhibitor with a K_i of 540 nM. Razaxaban hydrochloride has strongly antithrombotic activity.

In vitro activity

On the basis of razaxaban's excellent in vitro potency and selectivity profile, high free fraction in human plasma, good oral bioavailability, and in vivo efficacy in antithrombotic models, razaxaban HCl was selected for clinical development as razaxaban (DPC 906, BMS-561389).

Reference: J Med Chem. 2005 Mar 24;48(6):1729-44. <https://pubmed.ncbi.nlm.nih.gov/15771420/>

In vivo activity

Razaxaban inhibited thrombus and fibrin formation at the highest concentrations tested in this study. No difference in drug effect was apparent at different axial positions.

Reference: J Thromb Thrombolysis. 2012 Jan;33(1):6-15. <https://pubmed.ncbi.nlm.nih.gov/22120925/>

Note: The information listed here was extracted from literature. MedKoo has not independently retested and confirmed the accuracy of these methods. Customer should use it just for a reference only.