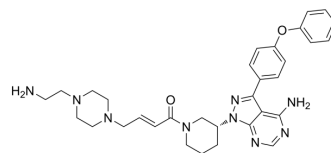


## Ibrutinib-MPEA

<b>Cat. No.:</b>	HY-43521		
<b>CAS No.:</b>	1710768-30-1		
<b>Molecular Formula:</b>	C <sub>32</sub> H <sub>39</sub> N <sub>9</sub> O <sub>2</sub>		
<b>Molecular Weight:</b>	581.71		
<b>Target:</b>	Btk		
<b>Pathway:</b>	Protein Tyrosine Kinase/RTK		
<b>Storage:</b>	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	6 months
		-20°C	1 month



### SOLVENT & SOLUBILITY

#### In Vitro

DMSO : 33.33 mg/mL (57.30 mM; Need ultrasonic)

Concentration	Solvent	Mass	1 mg	5 mg	10 mg
			1 mg	5 mg	10 mg
Preparing Stock Solutions	1 mM		1.7191 mL	8.5953 mL	17.1907 mL
	5 mM		0.3438 mL	1.7191 mL	3.4381 mL
	10 mM		0.1719 mL	0.8595 mL	1.7191 mL

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

#### In Vivo

- Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)  
Solubility: 5 mg/mL (8.60 mM); Suspended solution; Need ultrasonic
- Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline  
Solubility: ≥ 3.33 mg/mL (5.72 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% corn oil  
Solubility: ≥ 3.33 mg/mL (5.72 mM); Clear solution

### BIOLOGICAL ACTIVITY

#### Description

Ibrutinib-MPEA (Compound 20) is ibrutinib derivative. Ibrutinib is a covalent and irreversible inhibitor of Bruton's tyrosine kinase (BTK) that has been used to treat haematological malignancies<sup>[1]</sup>.

### REFERENCES

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[1]. Liu N, et al. Direct and two-step bioorthogonal probes for Bruton's tyrosine kinase based on ibrutinib: a comparative study. *Org Biomol Chem*. 2015 May 14;13(18):5147-57.

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**Caution: Product has not been fully validated for medical applications. For research use only.**

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