## **Product** Data Sheet

## CRTH2-IN-1

 Cat. No.:
 HY-U00423

 CAS No.:
 926661-54-3

 Molecular Formula:
  $C_{21}H_{21}FN_2O_4S$ 

Molecular Weight: 416.47

Target: Prostaglandin Receptor

Pathway: GPCR/G Protein

Storage: Please store the product under the recommended conditions in the Certificate of

Analysis.

## **BIOLOGICAL ACTIVITY**

Description	CRTH2-IN-1 (Ramatroban analog) is a selective prostaglandin D2 receptor DP2 (CRTH2) antagonist with an IC $_{50}$ of 6 nM in a human DP2 binding assay.			
IC <sub>50</sub> & Target	CYP 2C9 5 μM (IC <sub>50</sub> )	CYP3A4 7 μM (IC <sub>50</sub> )	hDP2 6 nM (IC <sub>50</sub> )	hDP1 1 μM (IC <sub>50</sub> )
In Vitro	CRTH2-IN-1 (Ramatroban analog, Compound 5) is a novel prostaglandin D2 receptor DP2 (CRTH2) antagonist with an IC $_{50}$ of 7 nM in a human whole blood eosinophil shape change assay (hESC). CRTH2-IN-1 (Ramatroban analog) is a novel tricyclic antagonist of the prostaglandin D2 receptor DP2 (CRTH2) with efficacy in a murine model of allergic rhinitis. Human prostaglandin D1 receptor (hDP1) binding is performed using $^{3}$ H-PGD2 and human platelet membranes. Human thromboxane receptor (hTP) binding performed using human platelet membranes and $^{3}$ H-SQ-29,548. Human prostacyclin receptor (hIP) binding performed using hIP/293 membranes and $^{3}$ Hiloprost. CRTH2-IN-1 inhibits hDP1 binding with an IC $_{50}$ of $^{1}$ µM. CRTH2-IN-1 inhibits hTP and hIP binding with IC $_{50}$ s of $^{1}$ 100 µM. CRTH2-IN-1 inhibits human CYP isoforms CYP3A4, CYP			

## **REFERENCES**

[1]. Stearns BA, et al. Novel tricyclic antagonists of the prostaglandin D2 receptor DP2 with efficacy in a murine model fallergic rhinitis. Bioorg Med Chem Lett. 2009 Aug 15;19(16):4647-51.

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

2C9 and CYP2D6 with IC<sub>50</sub>s of 7, 5 and >30  $\mu$ M, respectively<sup>[1]</sup>.

 $\label{lem:caution:Product} \textbf{Caution: Product has not been fully validated for medical applications. For research use only.}$ 

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