

# **Data Sheet**

Product Name: Namodenoson

 Cat. No.:
 CS-5932

 CAS No.:
 163042-96-4

 Molecular Formula:
 C18H18CIIN6O4

Molecular Weight: 544.73

Target:Adenosine ReceptorPathway:GPCR/G Protein

**Solubility:** DMSO :  $\geq$  31 mg/mL (56.91 mM)

## **BIOLOGICAL ACTIVITY:**

Namodenoson (CF-102) is a selective A3 adenosine receptor agonist (Ki = 0.33 nM). Displays 2500- and 1400-fold selectivity over A1 and A2A receptors respectively. IC50 & Target: Ki:0.33 nM (A3 adenosine receptor)<sup>[1][2]</sup>. **In Vitro:** In human ADF cells of astroglial lineage, 100 nM Namodenoson (2-Cl-IB-MECA) caused a marked reorganization of the cytoskeleton, with appearance of stress fibres and numerous cell protrusions. High concentrations of Namodenoson (2-Cl-IB-MECA) directly cause influx of Ca2+<sup>[2]</sup>. **In Vivo:** Intravenous administration of 200  $\mu$ g/kg Namodenoson (2-Cl-IB-MECA) resulted in a short-lasting hypotension, which was accompanied by a 50-100-fold increase in plasma histamine concentrations. Administration of a second dose of Namodenoson (2-Cl-IB-MECA) did not elicit any hemodynamic effects<sup>[1]</sup>.

### References:

[1]. Van Schaick EA et al. Hemodynamic effects and histamine release elicited by the selective adenosine A3 receptor agonist 2-Cl-IB-MECA in conscious rats. Eur J Pharmacol. 1996 Jul 25;308(3):311-4.

[2]. Jacobson KA et al. Adenosine A3 receptors: novel ligands and paradoxical effects. Trends Pharmacol Sci. 1998 May;19(5):184-91.

## **CAIndexNames:**

 $\beta-D-Ribofuranuronamide,\ 1-[2-chloro-6-[[(3-iodophenyl)methyl]amino]-9H-purin-9-yl]-1-deoxy-N-methyl-purin-9-yl-purin-9$ 

#### **SMILES:**

O[C@H]([C@@H]1O)[C@@H](O[C@@H]1C(NC)=O)N2C3=NC(CI)=NC(NCC4=CC(I)=CC=C4)=C3N=C2

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

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