

## Product Specification Sheet

**Product Name:** CGS-21680

**Catalog Number:** C2216

**Technical information:**

Chemical Formula:  $C_{23}H_{29}N_7O_6$

CAS #: 124182-57-6

Molecular Weight: 499.52

Purity: > 98%

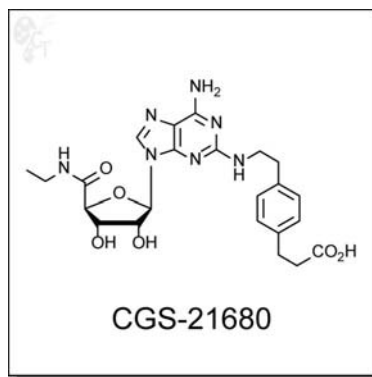
Appearance: White solid

Solubility: Soluble in DMSO up to 100 mM

Chemical Name: 3-[4-[2-[ [6-amino-9-[(2R,3R,4S,5S)-5-(ethylcarbamoyl)-3,4-dihydroxy-oxolan-2-yl]purin-2-yl]amino]ethyl]phenyl]propanoic acid

Storage: Store solid powder at 4°C desiccated; Store DMSO solution at -20°C.

Shelf Life: In the unopened package, powder is stable for 1 year and DMSO solution is stable for 6 months under proper storage condition.



- Handling:**
- To make 10 mM stock solution, add 0.2mL of DMSO for each mg of CGS-21680
  - For DMSO solution, briefly spin the vial at 500 rpm in a 50 mL conical tube to ensure maximum sample recovery.

**Biological Activity:** CGS21680, an A2A adenosine receptor agonist, is under investigation in various inflammation models for potential novel therapies. For example, CGS21680 possesses an anti-inflammatory effect during chronic inflammation and lessens the tissue damage associated with collagen-induced arthritis. [1]

CGS21680 reduces spinal cord injury-induced phosphorylation of JNK and MAPK. It was shown also to reduce the influx of MPO-positive leukocytes, NFkB activation, and iNOS expression. Additionally, CGS21680 reduced phosphorylation of p65 on Ser536. [2]

In acute lung inflammation models, CGS21680 was shown to reduce neutrophil infiltration and thus degree of lung injury after a carrageenan-challenge. [3]

- Reference:**
1. Mazzon et al., CGS 21680, an agonist of the adenosine (A2A) receptor, reduces progression of murine type II collagen-induced arthritis. *J. Rheumatol.*, 2011, 38(10), 2119-2129. Pubmed ID: 21765105
  2. Genovese, The selective adenosine A2A receptor agonist CGS 21680 reduces JNK MAPK activation in oligodendrocytes in injured spinal cord. *Shock*, 2009, 32(6), 578-585. Pubmed ID: 19295488
  3. Impellizzeri et al., CGS 21680, an agonist of the adenosine (A2A) receptor, decreases acute lung inflammation. *Eur. J. Pharmacol.* 2011, 668, 305-316. Pubmed ID: 21756897

To reorder: <http://www.cellagentech.com/CGS-21680/>

For Technical Support: [technical@cellagentech.com](mailto:technical@cellagentech.com)

*Chemicals are sold for research use only, not for clinical or diagnostic use.*