

Product Specification Sheet

Product Name: SD-169

Catalog Number: C7216

Technical information:

Chemical Formula: $C_9H_8N_2O$

CAS #: 1670-87-7

Molecular Weight: 160.17

Purity: > 98%

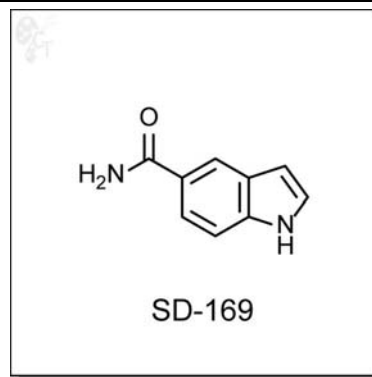
Appearance: White solid

Solubility: Soluble in DMSO up to 22 mM

Chemical Name: 1H-indole-5-carboxamide

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 0.624mL of DMSO for each mg of SD-169.
 - For DMSO solution, briefly spin the vial at 500 rpm in a 50 mL conical tube to ensure maximum sample recovery.

Biological Activity: SD169 is an indole-5-carboxamide, orally-available, ATP-competitive, α -selective p38 MAPK inhibitor that targets a wide variety of inflammatory cells, including neutrophils, monocytes, macrophages, B and CD4+ T cells, and endothelial cells. [1] Through interactions with Schwann cell and TNF activity, SD169 promotes axonal regeneration in peripheral nerves. [2]

SD169 has been shown to reduce myeloma-induced osteolytic bone lesions and restored bone mass by downregulating osteoclastogenesis and osteoblastogenesis in xenografted primary myeloma-SCID-hu or myeloma cell line-SCID mouse models. [3] SD169 was also shown downregulates pp38 in myeloma cells in vitro and in vivo.

In the diabetes therapeutic area, SD169 significantly reduces p38 and HSP60 expression in T cells of the pancreatic beta islets. In studies using hyperglycemic NOD mice, SD169 treatment lowered blood glucose and improved glucose homeostasis. [4]

- Reference:**
1. Medicherla et al., p38 MAPK inhibition reduces diabetes-induced impairment of wound healing. *Diabetes, Metab. Syndr. Obes.* 2009, 2, 91-100. Pubmed ID: 21437122
 2. Myers et al., Inhibition of p38 MAP kinase activity enhances axonal regeneration. *Exp. Neurol.* 2003, 184, 606-614. Pubmed ID: 14769353
 3. Yang et al., Constitutive activation of p38 MAPK in tumor cells contributes to osteolytic bone lesions in multiple myeloma. *Leukemia*, 2012, 26, 2114-2123. Pubmed ID: 22425892
 4. Medicherla et al., *J. Pharmacol. Exp. Ther.* 2006, 318(1), 99-107. Pubmed ID: 16603672

To reorder: <http://www.cellagentech.com/SD-169/>

For Technical Support: technical@cellagentech.com

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