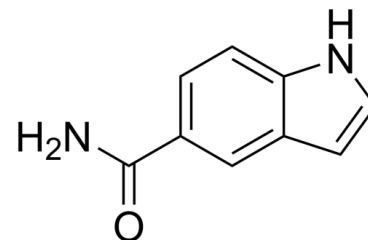


## Data Sheet

<b>Product Name:</b>	SD-169
<b>Cat. No.:</b>	CS-W016161
<b>CAS No.:</b>	1670-87-7
<b>Molecular Formula:</b>	C <sub>9</sub> H <sub>8</sub> N <sub>2</sub> O
<b>Molecular Weight:</b>	160.18
<b>Target:</b>	p38 MAPK
<b>Pathway:</b>	MAPK/ERK Pathway
<b>Solubility:</b>	DMSO : 100 mg/mL (624.30 mM; Need ultrasonic)



### BIOLOGICAL ACTIVITY:

SD-169 is an orally active ATP-competitive inhibitor of **p38 $\alpha$  MAPK**, with an **IC<sub>50</sub>** of 3.2 nM. SD-169 also weakly inhibits **p38 $\beta$  MAPK** with an **IC<sub>50</sub>** of 122 nM. SD-169 prevents the development and progression of diabetes by inhibiting T cell infiltration and activation<sup>[1]</sup>.  
IC<sub>50</sub> & Target: IC<sub>50</sub>: 3.2 nM (p38 $\alpha$  MAPK), 122 nM (p38 $\beta$  MAPK)<sup>[1]</sup> *In Vitro*: SD-169 significantly reduces p38 and HSP60 expression in T cells of the pancreatic beta islets<sup>[1]</sup>.

SD-169 demonstrates 38-fold potency against p38 $\alpha$  MAP kinase (IC<sub>50</sub>=3.2 nM) than p38 $\beta$  MAP kinase (IC<sub>50</sub>=122 nM)<sup>[1]</sup>.

### References:

[1]. Medicherla S, et al. Preventive and therapeutic potential of p38 alpha-selective mitogen-activated protein kinase inhibitor in nonobese diabetic mice with type 1 diabetes. *J Pharmacol Exp Ther.* 2006 Jul;318(1):99-107.

### CAIndexNames:

1H-Indole-5-carboxamide

### SMILES:

O=C(C1=CC2=C(NC=C2)C=C1)N

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

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