

## **Data Sheet**

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Global Supplier of Chemical Probes, Inhibitors & Agonists.

 Product Name
 :
 BI 409306

 Cat. No.
 :
 PC-60208

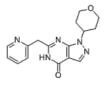
 CAS No.
 :
 1189767-28-9

 Molecular Formula
 :
 C<sub>16</sub>H<sub>17</sub>N<sub>5</sub>O<sub>2</sub>

 Molecular Weight
 :
 311.345

**Target** : Phosphodiesterase (PDE)

**Solubility** : 10 mM in DMSO



## **Biological Activity**

BI 409306 (SUB 166499) is a potent and selective inhibitor of human and rat **PDE9A** with IC50 of 65 nM and 168 nM, respectively.

BI 409306 increased cGMP levels in rat prefrontal cortex and cerebrospinal fluid and attenuated a reduction in mouse striatum cGMP induced by the NMDA-receptor antagonist MK-801.

BI 409306 enhanced LTP induced by both weak and strong tetanic stimulation in ex vivo rat brain slices.

BI 409306 reversed MK-801-induced working memory deficits in a T-maze spontaneous-alternation task and improved long-term memory in an object recognition task in mice.

BI 409306 increased brain cGMP levels, promoted long-term potentiation, and improved episodic and working memory performance in rodents.

## References

Moschetti V, et al. Br J Clin Pharmacol. 2016 Nov;82(5):1315-1324.

Brown D, et al. Neurol Ther. 2017 Nov 24. doi: 10.1007/s40120-017-0085-5.

3. Rosenbrock H, et al. J Pharmacol Exp Ther. 2019 Dec;371(3):633-641.

Caution: Product has not been fully validated for medical applications. Lab Use Only!

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