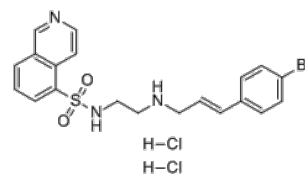


**Product Name** : PKA inhibitor H89  
**Cat. No.** : PC-20821  
**CAS No.** : 130964-39-5  
**Molecular Formula** : C<sub>20</sub>H<sub>22</sub>BrCl<sub>2</sub>N<sub>3</sub>O<sub>2</sub>S  
**Molecular Weight** : 519.28  
**Target** : Other Targets  
**Solubility** : 10 mM in DMSO



CAS: 130964-39-5

## Biological Activity

PKA inhibitor H89 (H-89 dihydrochloride) is a potent, selective cAMP-dependent protein kinase A (**PKA**) inhibitor with IC<sub>50</sub> of 48 nM, weakly inhibits PKG, PKC, casein kinases.

PKA inhibitor H89 causes a dose-dependent inhibition of the forskolin-induced protein phosphorylation, with no decrease in intracellular cyclic AMP levels in PC12D cells.

PKA inhibitor H89 significantly inhibits the forskolin-induced neurite outgrowth from PC12D cells.

PKA inhibitor H89 (30 μM) inhibited significantly cAMP-dependent histone IIb phosphorylation activity in cell lysates but did not affect other protein phosphorylation activity.

PKA inhibitor H89 significantly increases seizure latency and threshold in PTZ-treated animals.

## References

Hansen SH, et al. *J Cell Biol.* 1994 Aug;126(3):677-87.

Chijiwa T, et al. *J Biol Chem.* 1990 Mar 25;265(9):5267-72.

Hosseini-Zare MS, et al. *Eur J Pharmacol.* 2011 Nov 30;670(2-3):464-70.

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

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