

# PRODUCT INFORMATION



**CP 316,819**

Item No. 32856

**CAS Registry No.:** 186392-43-8  
**Formal Name:** 5-chloro-N-[(1S,2R)-2-hydroxy-3-(methoxymethylamino)-3-oxo-1-(phenylmethyl)propyl]-1H-indole-2-carboxamide

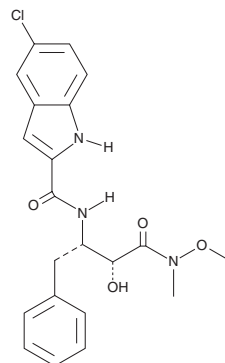
**MF:** C<sub>21</sub>H<sub>22</sub>ClN<sub>3</sub>O<sub>4</sub>  
**FW:** 415.9

**Purity:** ≥98%

**Supplied as:** A solid

**Storage:** -20°C

**Stability:** ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

## Laboratory Procedures

CP 316,819 is supplied as a solid. A stock solution may be made by dissolving the CP 316,819 in the solvent of choice, which should be purged with an inert gas. CP 316,819 is soluble in the organic solvent DMSO at a concentration of approximately 40 mg/ml.

## Description

CP 316,819 is an inhibitor of glycogen phosphorylase A (IC<sub>50</sub> = 40 nM for the human liver enzyme).<sup>1</sup> It increases intracellular glycogen content in astrocytes when used at a concentration of 10 μM.<sup>2</sup> CP 316,819 (250 mg/kg) increases brain glycogen content but does not prevent depletion of glycogen stores in a rat model of brain ischemia induced by decapitation. It also prolongs neuronal function and decreases neurodegeneration in a rat model of insulin-induced hypoglycemia.

## References

1. Yu, L.J., Chen, Y., Treadway, J.L., *et al.* Establishment of correlation between in vitro enzyme binding potency and in vivo pharmacological activity: Application to liver glycogen phosphorylase a inhibitors. *J. Pharmacol. Exp. Ther.* **317**(3), 1230-1237 (2006).
2. Suh, S.W., Bergher, J.P., Anderson, C.M., *et al.* Astrocyte glycogen sustains neuronal activity during hypoglycemia: Studies with the glycogen phosphorylase inhibitor CP-316,819 ([R-R\*,S\*]-5-chloro-N-[2-hydroxy-3-(methoxymethylamino)-3-oxo-1-(phenylmethyl)propyl]-1H-indole-2-carboxamide). *J. Pharmacol. Exp. Ther.* **321**(1), 45-50 (2007).

### WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

### SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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