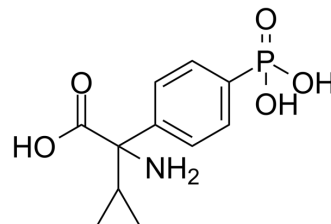


CPPG

| | | | |
|---------------------------|---|-------|----------|
| Cat. No.: | HY-101333 | | |
| CAS No.: | 183364-82-1 | | |
| Molecular Formula: | C ₁₁ H ₁₄ NO ₅ P | | |
| Molecular Weight: | 271 | | |
| Target: | mGluR | | |
| Pathway: | GPCR/G Protein; Neuronal Signaling | | |
| Storage: | Powder | -20°C | 3 years |
| | | 4°C | 2 years |
| | In solvent | -80°C | 6 months |
| | | -20°C | 1 month |



SOLVENT & SOLUBILITY

In Vitro

1M NaOH : 50 mg/mL (184.50 mM; ultrasonic and warming and heat to 60°C)

| Concentration | Mass | | |
|---------------|-----------|------------|------------|
| | 1 mg | 5 mg | 10 mg |
| 1 mM | 3.6900 mL | 18.4502 mL | 36.9004 mL |
| 5 mM | 0.7380 mL | 3.6900 mL | 7.3801 mL |
| 10 mM | 0.3690 mL | 1.8450 mL | 3.6900 mL |

Please refer to the solubility information to select the appropriate solvent.

BIOLOGICAL ACTIVITY

Description

CPPG ((RS)-CPPG) is a potent group II/III mGlu receptors antagonist. CPPG exhibits some selectivity (approximately 20 fold) for group III (IC₅₀=2.2 nM) over group II (IC₅₀=46.2 nM) mGlu receptors in the rat cerebral cortex. CPPG has weak effects at group I mGlu receptors^[1].

IC₅₀ & Target

| | |
|--|--|
| group III mGlu receptors 2.2 nM (IC ₅₀) | group II mGlu receptors 46.2 nM (IC ₅₀) |
|--|--|

In Vitro

CPPG ((RS)-CPPG) potently reversed both L-AP4 (IC₅₀=2.2 nM)- and L-CCG-I (IC₅₀=46.2 nM) -mediated inhibition of forskolin-stimulated cyclic AMP accumulation in adult rat cortical slices. CPPG is a potent antagonist against group II/III mGlu receptors in the adult rat cortex and shows moderate selectivity for group III mGlu receptors. Conversely, CPPG has weak effects at group I mGlu receptors in both the neonatal rat cortex and cultured cerebellar granule cells^[1].
MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Toms NJ, et al. The effects of (RS)-alpha-cyclopropyl-4-phosphonophenylglycine ((RS)-CPPG), a potent and selective metabotropic glutamate receptor antagonist. Br J Pharmacol. 1996 Nov;119(5):851-4.

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

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