**Product overview**

**Name**  
JNJ 16259685

**Cat No**  
HB0348

**Short description**  
Potent, selective, non-competitive mGlur antagonist

**Biological description**  
Potent, selective and non-competitive mGlur receptor antagonist ($K_i = 0.34$ nM at mGlur$_{1a}$).

Displays no activity at mGlur$_2$, mGlur$_3$, mGlur$_4$, mGlur$_6$, NMDA or AMPA receptors ($IC_{50} = >10$ μM). Blood-brain barrier permeable.

Inhibits glutamate-induced Ca$^{2+}$ mobilization ($IC_{50} = 3.24$ nM at recombinant rat mGlur$_{1a}$ receptor).

**Biological action**  
Antagonist

**Purity**  
>98%

**Properties**

**Chemical name**  
(3,4-Dihydro-2H-pyrano[2,3-b]quinolin-7-yl)-(cis-4-methoxycyclohexyl)-methanone

**Molecular Weight**  
325.41

**Chemical structure**

![Chemical Structure](image)

**Molecular Formula**  
C$_{20}$H$_{23}$NO$_3$

**CAS Number**  
409345-29-5

**PubChem identifier**  
11313361

**SMILES**

COC1CCC(CC1)C(=O)C2=CC3=CC4=C(N=C3C=C2)OCCC4

**InChI**

InChI=1S/C20H23NO3/c1-23-17-7-4-13(5-8-17)19(22)14-6-9-18-16(11-14)12-15-3-2-10-24-20(15)21-18/h6,9,11-13,17H,2-5,7-8,10H2,1H3

**InChIKey**

QOTAQTRFJWLFCR-UHFFFAOYSA-N

**Appearance**  
Off-white solid

**Storing and Using Your Product**

**Storage instructions**  
+4 °C

**Solubility overview**  
Soluble in ethanol (100mM) and in DMSO (25mM)

**Important**  
This product is for RESEARCH USE ONLY and is not intended for therapeutic or diagnostic use. Not for human or veterinary use.

**References for JNJ 16259685**
JNJ16259685, a highly potent, selective and systemically active mGlu1 receptor antagonist.
PubMedID: 15555631

Effects of mGluR1 antagonism in the dorsal hippocampus on drug context-induced reinstatement of cocaine-seeking behavior in rats.
PubMedID: 19847405

mGluR1 within the nucleus accumbens regulates alcohol intake in mice under limited-access conditions.
PubMedID: 24467847

Synthesis, structure-activity relationship, and receptor pharmacology of a new series of quinoline derivatives acting as selective, noncompetitive mGlu1 antagonists.
PubMedID: 15771457