

# Glucokinase

Hexokinase IV;Hexokinase D

HDAC Inhibitor:  
Vorinostat (SAHA)



HDAC (Histone deacetylase)

Mutations of the gene for this enzyme can cause unusual forms of diabetes or hypoglycemia.

Glucokinase is an enzyme that facilitates phosphorylation of glucose to glucose-6-phosphate. Glucokinase occurs in cells in the liver, pancreas, gut, and brain of humans and most other vertebrates. In each of these organs it plays an important role in the regulation of carbohydrate metabolism by acting as a glucose sensor, triggering shifts in metabolism or cell function in response to rising or falling levels of glucose, such as occur after a meal or when fasting. Glucokinase has a lower affinity for glucose than the other hexokinases do, and its activity is localized to a few cell types, leaving the other three hexokinases as more important preparers of glucose for glycolysis and glycogen synthesis for most tissues and organs.

## Glucokinase Inhibitors & Modulators

<p><b>AM-2394</b></p> <p style="text-align: right;">Cat. No.: HY-100221</p>	<p><b>AMG-3969</b></p> <p style="text-align: right;">Cat. No.: HY-12411</p>
<p><b>Bioactivity:</b> AM-2394 is a structurally distinct <b>glucokinase</b> activator (GKA). AM-2394 activates glucokinase (GK) with an <b>EC<sub>50</sub></b> of 60 nM.</p> <p><b>Purity:</b> 98.71%</p> <p><b>Clinical Data:</b> No Development Reported</p> <p><b>Size:</b> 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg</p> 	<p><b>Bioactivity:</b> AMG-3969 is a potent glucokinase-glucokinase regulatory protein interaction ( <b>GK-GKRP</b>) disruptor with an <b>IC<sub>50</sub></b> of 4 nM.</p> <p><b>Purity:</b> 99.63%</p> <p><b>Clinical Data:</b> No Development Reported</p> <p><b>Size:</b> 10mM x 1mL in DMSO, 1 mg, 5 mg, 10 mg, 50 mg, 100 mg</p> 
<p><b>Glucokinase activator 1</b></p> <p style="text-align: right;">Cat. No.: HY-101788</p>	<p><b>LY2608204</b></p> <p style="text-align: right;">Cat. No.: HY-13529</p>
<p><b>Bioactivity:</b> Glucokinase activator 1 is a liver-directed <b>glucokinase</b> activator with an <b>EC<sub>50</sub></b> of 34 nM.</p> <p><b>Purity:</b> &gt;98%</p> <p><b>Clinical Data:</b> No Development Reported</p> <p><b>Size:</b></p> 	<p><b>Bioactivity:</b> LY2608204 is a activator of glucokinase (GK) with EC50 of 42 nM.</p> <p><b>Purity:</b> 98.18%</p> <p><b>Clinical Data:</b> Phase 2</p> <p><b>Size:</b> 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg</p> 
<p><b>Palmitelaidic Acid</b> (9-trans-Hexadecenoic acid; trans-Palmitoleic acid)</p> <p style="text-align: right;">Cat. No.: HY-N2341</p>	<p><b>PF-04991532</b></p> <p style="text-align: right;">Cat. No.: HY-100181</p>
<p><b>Bioactivity:</b> Palmitelaidic acid is the trans isomer of palmitoleic acid. Palmitoleic acid is one of the most abundant fatty acids in serum and tissue.</p> <p><b>Purity:</b> 98.00%</p> <p><b>Clinical Data:</b> No Development Reported</p> <p><b>Size:</b> 10 mg</p> 	<p><b>Bioactivity:</b> PF-04991532 is a potent, hepatoselective <b>glucokinase</b> activator with <b>EC<sub>50</sub></b>s of 80 and 100 nM in human and rat, respectively.</p> <p><b>Purity:</b> &gt;98%</p> <p><b>Clinical Data:</b> No Development Reported</p> <p><b>Size:</b> 5 mg, 10 mg</p> 
<p><b>PSN-GK1</b></p> <p style="text-align: right;">Cat. No.: HY-U00411</p>	<p><b>Ro 28-1675</b></p> <p style="text-align: right;">Cat. No.: HY-10595</p>
<p><b>Bioactivity:</b> PSN-GK1 is a potent <b>glucokinase</b> activator with an <b>EC<sub>50</sub></b> of 0.13 μM.</p> <p><b>Purity:</b> &gt;98%</p> <p><b>Clinical Data:</b> No Development Reported</p> <p><b>Size:</b> 1 mg, 5 mg, 10 mg, 20 mg</p> 	<p><b>Bioactivity:</b> Ro 28-1675 (Ro 0281675) is a potent allosteric GK activator with a SC1.5 value of 0.24± 0.0019 uM. IC50 value: 0.24± 0.0019 uM (SC1.5) [1] Target: Glucokinase activator The R stereoisomer Ro 28-1675 activated GK with a SC1.5 of 0.24 uM, while the S isomer did not activated GK up to 10 uM. Oral...</p> <p><b>Purity:</b> 99.41%</p> <p><b>Clinical Data:</b> No Development Reported</p> <p><b>Size:</b> 10mM x 1mL in DMSO, 5 mg, 10 mg</p> 