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Inhibitors, Screening Libraries, Proteins

Glucokinase

Hexokinase IV; Hexokinase D

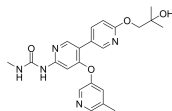
Glucokinase is an enzyme that facilitates phosphorylation of glucose to glucose-6-phosphate. Glucokinase occurs in cells in the liver, pancreas, gut, and brain of humans and most other vertebrates. In each of these organs it plays an important role in the regulation of carbohydrate metabolism by acting 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. Mutations of the gene for this enzyme can cause unusual forms of diabetes or hypoglycemia.

Glucokinase Inhibitors, Activators & Modulators

AM-2394

Cat. No.: HY-100221

AM-2394 is a structurally distinct **glucokinase activator** (GKA). AM-2394 activates glucokinase (GK) with an EC_{50} of 60 nM.

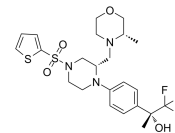


Purity: 99.48%
Clinical Data: No Development Reported
Size: 5 mg, 10 mg, 50 mg, 100 mg

AMG-1694

Cat. No.: HY-12614

AMG-1694 is a potent **glucokinase–glucokinase regulatory protein** (GK–GKRP) disruptors and promotes the dissociation of the GK–GKRP complex with an IC_{50} of 7 nM, indirectly increasing GK enzymatic activity.

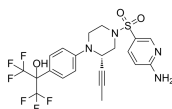


Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg

AMG-3969

Cat. No.: HY-12411

AMG-3969 is a potent glucokinase–glucokinase regulatory protein interaction (GK–GKRP) disruptor with an IC_{50} of 4 nM.

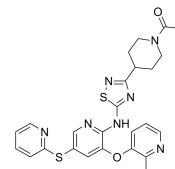


Purity: 99.74%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 1 mg, 5 mg, 10 mg, 50 mg, 100 mg

AR453588

Cat. No.: HY-133127

AR453588 is a potent and orally bioavailable anti-diabetic **glucokinase activator**, with an EC_{50} of 42 nM. AR453588 shows anti-hyperglycemic activity.

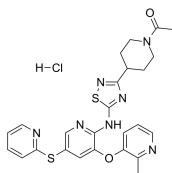


Purity: 99.69%
Clinical Data: No Development Reported
Size: 5 mg, 10 mg, 25 mg, 50 mg, 100 mg

AR453588 hydrochloride

Cat. No.: HY-133127A

AR453588 hydrochloride is a potent and orally bioavailable anti-diabetic glucokinase activator, with an EC_{50} of 42 nM. AR453588 hydrochloride shows anti-hyperglycemic activity.

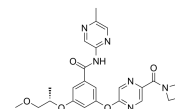


Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg

AZD1656

Cat. No.: HY-15675

AZD1656 is a potent, selective and orally active **glucokinase activator** with an EC_{50} of 60 nM. AZD1656 has the potential for type 2 diabetes research.

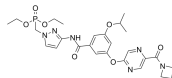


Purity: 98.02%
Clinical Data: No Development Reported
Size: 5 mg, 10 mg

BMS-820132

Cat. No.: HY-144289

BMS-820132 is a partial **glucokinase activator** with a AC_{50} of 29 nM.



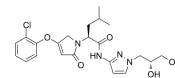
Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg

Dorzagliatin

(HMS5552)

Cat. No.: HY-109030

Dorzagliatin (HMS5552), a dual-acting **glucokinase** (GK) activator, improves glycaemic control and pancreatic β -cell function in type 2 diabetes.

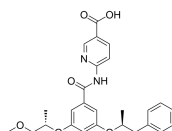


Purity: 99.68%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 5 mg, 10 mg, 25 mg, 50 mg, 100 mg

GKA50

Cat. No.: HY-15671

GKA50 is a potent **glucokinase activator** (EC_{50} =33 nM at 5 mM glucose). GKA50 stimulates insulin release from mouse islets of Langerhans. GKA50 is a glucose-like activator of beta-cell metabolism in rodent and human islets and a Ca^{2+} -dependent modulator of insulin secretion.

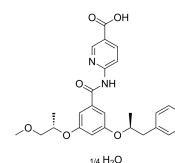


Purity: ≥98.0%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 1 mg, 5 mg

GKA50 quarterhydrate

Cat. No.: HY-15671A

GKA50 quarterhydrate is a potent **glucokinase activator** (EC_{50} =33 nM at 5 mM glucose) and stimulates insulin release from mouse islets of Langerhans.



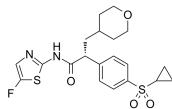
Purity: ≥98.0%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg

<p>Globalagliatin (LY2608204)</p>	<p>Glucokinase activator 1</p>
<p>Globalagliatin (LY2608204) is an activator of glucokinase (GK) with EC₅₀ of 42 nM.</p> <p>Purity: ≥98.0% Clinical Data: Phase 2 Size: 10 mM × 1 mL, 5 mg, 10 mg, 50 mg, 100 mg</p>	<p>Glucokinase activator 1 is a liver-directed glucokinase activator with an EC₅₀ of 34 nM.</p> <p>Purity: >98% Clinical Data: No Development Reported Size: 1 mg, 5 mg</p>
<p>Glucokinase activator 3</p>	<p>IHVR-11029</p>
<p>Glucokinase activator 3 is a potent and full Glucokinase (GK) activator with an AC₅₀ of 38 nM. Glucokinase activator 3 has the potential for the research of type 2 diabetes.</p> <p>Purity: >98% Clinical Data: No Development Reported Size: 1 mg, 5 mg</p>	<p>IHVR-11029 is a small molecule inhibitor of ER α-glucosidases, with an EC₅₀ of 0.09 μM.</p> <p>Purity: >98% Clinical Data: No Development Reported Size: 1 mg, 5 mg</p>
<p>MK-0941</p>	<p>MK-0941 free base</p>
<p>MK-0941 is a potent, orally active and allosteric glucokinase activator, with EC₅₀s of 240 and 65 nM for recombinant human glucokinase in the presence of 2.5 and 10 mM glucose, respectively. MK-0941 has potential in the treatment of type 2 diabetes.</p> <p>Purity: 98.84% Clinical Data: Phase 2 Size: 10 mM × 1 mL, 5 mg, 10 mg, 25 mg, 50 mg, 100 mg</p>	<p>MK-0941 free base is an orally active glucokinase activator, with EC₅₀s of 240 and 65 nM for recombinant human glucokinase in the presence of 2.5 and 10 mM glucose, respectively.</p> <p>Purity: >98% Clinical Data: Phase 2 Size: 1 mg, 5 mg</p>
<p>Palmitelaidic Acid (9-trans-Hexadecenoic acid; trans-Palmitoleic acid)</p>	<p>Palmitelaidic acid-d13</p>
<p>Palmitelaidic Acid (9-trans-Hexadecenoic acid) is the trans isomer of palmitoleic acid. Palmitoleic acid is one of the most abundant fatty acids in serum and tissue.</p> <p>Purity: ≥98.0% Clinical Data: No Development Reported Size: 10 mg (393 mM * 100 μL in Ethanol),</p>	<p>Palmitelaidic acid-d13 is the deuterium labeled Palmitelaidic Acid. Palmitelaidic Acid (9-trans-Hexadecenoic acid) is the trans isomer of palmitoleic acid. Palmitoleic acid is one of the most abundant fatty acids in serum and tissue.</p> <p>Purity: >98% Clinical Data: No Development Reported Size: 1 mg, 5 mg</p>
<p>PF-04937319</p>	<p>PF-04991532</p>
<p>PF-04937319 is a glucokinase activator (GKA) with EC₅₀ value of 154.4 μM, one of the most promising strategies for the treatment of type 2 diabetes mellitus.</p> <p>Purity: 99.78% Clinical Data: Phase 2 Size: 10 mM × 1 mL, 5 mg, 10 mg, 25 mg, 50 mg, 100 mg</p>	<p>PF-04991532 is a potent, hepatoselective glucokinase activator with EC₅₀s of 80 and 100 nM in human and rat, respectively.</p> <p>Purity: >98% Clinical Data: Phase 2 Size: 1 mg, 5 mg</p>

PSN-GK1

Cat. No.: HY-U00411

PSN-GK1 is a potent **glucokinase** activator with an EC_{50} of 0.13 μ M.



Purity: >98%

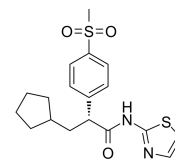
Clinical Data: No Development Reported

Size: 1 mg, 5 mg

RO-28-1675

Cat. No.: HY-10595

RO-28-1675 is a potent allosteric **glucokinase (GK)** activator with an EC_{50} of 54 nM. RO-28-1675 can be used for the research of type 2 diabetes.



Purity: 99.95%

Clinical Data: No Development Reported

Size: 10 mM × 1 mL, 5 mg, 10 mg