

Product Name	: Vericiguat
Synonyms	: —
Cat No.	: M21837
CAS Number	: 1350653-20-1
Molecular Formula	: C ₁₉ H ₁₆ F ₂ N ₈ O ₂
Formula Weight	: 426.38
Chemical Name	: —
Description	<p>Vericiguat (0.01 µM to 100 µM) stimulates recombinant sGC concentration dependently, by 1.7-fold to 57.6-fold. When combined with the NO donor diethylamine/nitric oxide complex (DEA/NO), vericiguat and DEA/NO have a synergistic effect on the enzyme activity over a wide range of concentrations. At highest concentrations of vericiguat (100 µM) and DEA/NO (100 nM), the specific activity of sGC is 341.6-fold above baseline. Vericiguat stimulates the sGC reporter cell line concentration dependently, with an EC₅₀ of 1005±145 nM. Vericiguat inhibits phenylephrine-induced contractions of rabbit saphenous artery rings, rabbit aortic rings, and canine femoral vein rings concentration dependently, with IC₅₀ values of 798, 692, and 3072 nM, respectively. Vericiguat inhibits the U46619-induced contractions of porcine coronary artery rings concentration dependently, with an IC₅₀ of 956 nM.</p>
Pathway	: Metabolic Enzyme/Protease
Target	: Guanylate Cyclase
Receptor	: —
Solubility	: DMSO : 60 mg/mL (140.72 mM; Need ultrasonic); H ₂ O : < 0.1 mg/mL (insoluble)
SMILES	: <chem>O=C(OC)NC1=C(N)N=C(C2=NN(CC3=CC=CC=C3F)C4=NC=C(F)C=C42)N=C1N</chem>
Storage	: (-20°C)
Stability	: ≥ 2 years
Reference	:

1. Follmann M, et al. Discovery of the Soluble Guanylate Cyclase Stimulator Vericiguat (BAY 1021189) for the Treatment of Chronic Heart Failure. J Med Chem. 2017 Jun 22;60(12):5146-5161.