# **PRODUCT** INFORMATION



## Vericiguat

Item No. 35253

CAS Registry No.: Formal Name:	1350653-20-1 N-[4,6-diamino-2-[5-fluoro-1-[(2-	$\square$
Formal Name.	fluorophenyl)methyl]-1H-pyrazolo[3,4-b]	
	pyridin-3-yl]-5-pyrimidinyl]-carbamic acid, methyl ester	N F
Synonyms:	BAY-1021189, MK-1242	F
MF:	C <sub>19</sub> H <sub>16</sub> F <sub>2</sub> N <sub>8</sub> O <sub>2</sub>	
FW:	426.4	N N
Purity:	≥98%	NH <sub>2</sub>
UV/Vis.:	λ <sub>max</sub> : 257 nm	H <sub>2</sub> N O
Supplied as:	A solid	N
Storage:	-20°C	н́ Ö
Stability:	≥4 years	

Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

#### Laboratory Procedures

Vericiguat is supplied as a solid. A stock solution may be made by dissolving the vericiguat in the solvent of choice, which should be purged with an inert gas. Vericiguat is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of vericiguat in these solvents is approximately 1 mg/ml.

#### Description

Vericiguat is a stimulator of soluble guanylyl cyclase (sGC).<sup>1</sup> It stimulates the formation of cGMP in CHO cells expressing recombinant rat sGC in the absence and presence of the nitric oxide (NO) donor SNAP (Item No. 82250;  $EC_{50}s = 1,005$  and 39 nM, respectively), an effect that can be reversed by the sGC inhibitor ODQ (Item No. 81410). Vericiguat inhibits phenylephrine-induced contractions in isolated rabbit saphenous artery rings, rabbit aortic rings, and canine femoral vein rings (IC505 = 798, 692, and 3,072 nM, respectively), as well as decreases the coronary perfusion pressure in isolated perfused rat hearts in a concentration-dependent manner. It decreases proteinuria and increases survival in rats expressing mouse renin ((mRenR2)27), a transgenic model for hypertension, when administered at doses of 3 or 10 mg/kg. Formulations containing vericiguat have been used in the treatment of heart failure.

#### Reference

1. Follmann, M., Ackerstaff, J., Redlich, G., et al. Discovery of the soluble guanylate cyclase stimulator vericiguat (BAY 1021189) for the treatment of chronic heart failure. J. Med. Chem. 60(12), 5146-5161 (2017).

WARNING THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

#### SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

#### WARRANTY AND LIMITATION OF REMEDY

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1180 EAST ELLSWORTH RD ANN ARBOR, MI 48108 · USA PHONE: [800] 364-9897 [734] 971-3335 FAX: [734] 971-3640 CUSTSERV@CAYMANCHEM.COM WWW.CAYMANCHEM.COM