

Product Datasheet

Nelociguat (orb1220488)

Catalog Number	orb1220488
Category	Small Molecules
Description	<p>Nelociguat(BAY60-4552) is a soluble guanylate cyclase stimulator (sGC stimulator). Soluble guanylate cyclase (sGC) is a key enzyme in the nitric oxide (NO) signalling pathway.(In Vitro):Soluble guanylate cyclase (sGC) is a key enzyme in the nitric oxide (NO) signalling pathway. Riociguat is metabolized to BAY60-4552 not only via cytochrome P450 isoenzymes 3A4 (CYP3A4), CYP2C8, and CYP2J2, but also via CYP1A1, located in the liver and lungs.(In Vivo):GSK2181236A and BAY 60-4552 provide partial benefit against hypertension-induced end-organ damage. In spontaneously hypertensive stroke-prone rats, a low dose of BAY 60-4552 decreases urine output and improved survival. A high dose also reduces urine output, and in addition reduces microalbuminuria and attenuates the increase in mean arterial pressure. Both the 0.3 and 3 mg/kg/day doses of BAY 60-4552 improves survival of 46 and 69%. Seven weeks of treatment with BAY 60-4552 (0.3 and 3.0 mg/kg/day) dose-dependently decreases urine output to 79±11 and 56±10 mL/day. BAY 60-4552, and vardenafil provides synergistic beneficial effects and might therefore salvage patients who experience treatment failures with PDE5 inhibitors after radical prostatectomy.</p>
Target	Guanylate Cyclase
Purity	>98% (HPLC)
MW	408.39
Target Areas	Guanylate Cyclase
Solubility (25°C)	DMSO:105 mg/mL (257.11 mM)
CAS Number	625115-52-8
Formula	$C_{19}H_{17}FN_8O_2$

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SMILES	<chem>COC(=O)Nc1c(N)nc(nc1N)-c1nn(Cc2ccccc2F)c2ncccc12</chem>
Chemical Name	methyl (4,6-diamino-2-(1-(2-fluorobenzyl)-1H-pyrazolo[3,4-b]pyridin-3-yl)pyrimidin-5-yl)carbamate
Storage	Storage temperature: -20°C. Stability: ≥ 2 years
Note	For research use only
Expiration Date	12 months from date of receipt.

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