

NOX Inhibitor IV, GKT136901 - CAS 955272-06-7 - Calbiochem Potent, orally available dual inhibitor of NOX1/NOX4. Blocks NOX-mediated ROS outburst and efficiently scavenges peroxynitrite.

Art. ID SAF-5340320001

Unit EA

Description

An orally bioavailable, non-toxic pyrazolopyridinedione based compound that acts as a potent and reversible inhibitor of NOX1- and NOX4-containing NADPH oxidase activity ($K_i = 160$ and 165 nM, respectively, Amplex Red assay) and devoid of antioxidant properties. At higher concentrations, affects NOX2 ($K_i = 1.53$ μ M). Blocks NOX-mediated ROS (reactive oxygen species) outburst in NOX isozyme expressing PMN cell membranes. Exhibits poor affinity towards xanthine oxidase, lipoxigenases-5/12, myeloperoxidase, MAO-B, iNOS and eNOS, several cytochrome P450 isozymes, PTP1B and a panel containing representative ion-channels and kinases at 10^{-8} M. Functions as a selective scavenger of peroxynitrite over nitric oxide, superoxide radical anion and hydroxyl radical. Please note that the molecular weight for this compound is batch-specific due to variable water content. Please refer to the vial label or the certificate of analysis for the batch-specific molecular weight. The molecular weight provided represents the baseline molecular weight without water. An orally bioavailable, non-toxic pyrazolopyridinedione based compound that acts as a potent and reversible inhibitor of NOX1- and NOX4-containing NADPH oxidase activity ($K_i = 160$ and 165 nM, respectively, Amplex Red assay) and devoid of antioxidant properties. At higher concentrations, affects NOX2 ($K_i = 1.53$ μ M). Blocks NOX-mediated ROS (reactive oxygen species) outburst in NOX isozyme expressing PMN cell membranes. Exhibits poor affinity towards xanthine oxidase, lipoxigenases-5/12, myeloperoxidase, MAO-B, iNOS and eNOS, several cytochrome P450 isozymes, PTP1B and a panel containing representative ion-channels and kinases at 10^{-8} M. Functions as a selective scavenger of peroxynitrite over nitric oxide, superoxide radical anion and hydroxyl radical.

Text/Information	Analyte/Parameter	CAS number	Concentration/Value	Unit	Method	Source
	2-(2-Chlorophenyl)-4-Me thyl-5-(Pyridin-2-Ylmet hyl)-1H-Pyrazolo[4,3-C] Pyridine-3,6(2H,5H)-Dio ne	[955272-06-7]				