

GKT136901

Chemical Properties

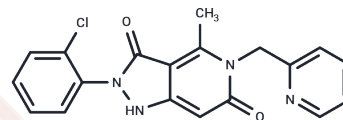
CAS No. : 955272-06-7

Formula: C₁₉H₁₅ClN₄O₂

Molecular Weight: 366.8

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year

Actual storage temperature shall be subject to the COA.



Biological Description

Description	GKT136901 (AK120765) is an inhibitor of NOX1/4. It acts as Selective and Direct Scavenger of Peroxynitrite
Targets(IC50)	NADPH, NADPH-oxidase
In vivo	GKT136901 is a novel NOX-1/4 inhibitor with potential application in the areas of diabetic nephropathy, stroke, or neurodegeneration[1]

Solubility Information

Solubility	DMSO: 32.5 mg/mL (88.6 mM), Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween 80+45% Saline: 2 mg/mL (5.45 mM), Sonication is recommended. <i>Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.</i>

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.7263 mL	13.6314 mL	27.2628 mL
5 mM	0.5453 mL	2.7263 mL	5.4526 mL
10 mM	0.2726 mL	1.3631 mL	2.7263 mL
50 mM	0.0545 mL	0.2726 mL	0.5453 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

S Schildknecht, A Weber, H R Gerding. The NOX1/4 Inhibitor GKT136901 as Selective and Direct Scavenger of Peroxynitrite. *Curr Med Chem.* 2014;21(3):365-76.

Fiona Augsburg, Aleksandra Filippova, Delphine Rasti. Pharmacological Characterization of the Seven Human NOX Isoforms and Their Inhibitors. *Redox Biol.* 2019 Sep;26:101272.

Sedeek M, et al. Critical role of Nox4-based NADPH oxidase in glucose-induced oxidative stress in the kidney: implications in type 2 diabetic nephropathy. *Am J Physiol Renal Physiol.* 2010 Dec;299(6):F1348-58.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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Tel: 781-999-4286 E_mail: info@targetmol.com Address: 34 Washington Street, Wellesley Hills, MA 02481