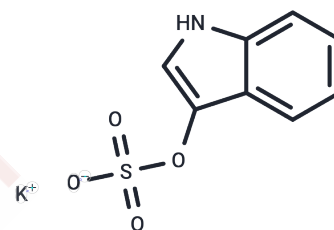


Potassium 1H-indol-3-yl sulfate

Chemical Properties

CAS No. :	2642-37-7
Formula:	C ₈ H ₆ KNO ₄ S
Molecular Weight:	251.30
Storage:	Store at low temperature Pure form: -20°C for 3 years In solvent: -80°C for 3 months



Actual storage temperature shall be subject to the COA.

Biological Description

Description	Potassium 1H-indol-3-yl sulfate (Potassium 3-indoxyl sulfate) is an agonist for the human Aryl Hydrocarbon Receptor (AhR), a key regulator of immune-inflammatory conditions. A metabolite of tryptophan derived from dietary protein, it is produced by intestinal bacteria and metabolized in the liver. In chronic kidney disease patients with impaired renal function, it accumulates in serum as a uremic toxin, inducing oxidative stress and accelerating disease progression. At 250 μ M, it activates NF-Kb, promoting TGF- β 1 and Smad3 expression in rat proximal tubular cells, which is associated with profibrotic activity.
Targets(IC50)	AhR,Endogenous Metabolite

Solubility Information

Solubility	DMSO: 100.00 mg/mL (397.93 mM),Sonication is recommended. H ₂ O: 50.00 mg/mL (198.97 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: 4.00 mg/mL (15.92 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	3.9793 mL	19.8965 mL	39.7931 mL
5 mM	0.7959 mL	3.9793 mL	7.9586 mL
10 mM	0.3979 mL	1.9897 mL	3.9793 mL
50 mM	0.0796 mL	0.3979 mL	0.7959 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

Zgoda-Pols J R , Chowdhury S , Wirth M , et al. Metabolomics analysis reveals elevation of 3-indoxyl sulfate in plasma and brain during chemically-induced acute kidney injury in mice: Investigation of nicotinic acid receptor agonists[J]. *Toxicology & Applied Pharmacology*, 2011, 255(1):48-56.

Ito S , Osaka M , Edamatsu T , et al. Crucial Role of the Aryl Hydrocarbon Receptor (AhR) in Indoxyl Sulfate-Induced Vascular Inflammation.[J]. *Journal of Atherosclerosis & Thrombosis*, 2016, 23(8):iii510-iii511.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

This product is for Research Use Only · Not for Human or Veterinary or Therapeutic Use

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