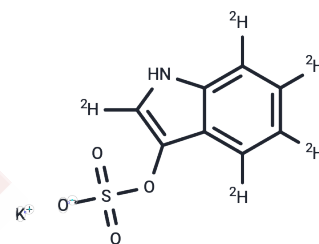


## Indoxyl Sulfate-D5 potassium salt

## Chemical Properties

CAS No. :	1644451-34-2
Formula:	C <sub>8</sub> H <sub>5</sub> D <sub>5</sub> KNO <sub>4</sub> S
Molecular Weight:	256.3278
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	Indoxyl Sulfate-D5 potassium salt is intended for use as an internal standard for the quantification of indoxyl sulfate by GC- or LC-MS. Indoxyl sulfate is a uremic toxin and a metabolite of tryptophan. It is formed via sulfation of indole, an intermediate generated from tryptophan by intestinal bacteria, by the sulfotransferase (SULT) isoform 1A1 variant 2 (SULT1A1*2) in the liver. Indoxyl sulfate activates the aryl hydrocarbon receptor (AhR) in HepG2 40/6 hepatoma cells (EC50 = 12.1 nM in a reporter assay). It also inhibits the organic anion transporter (OAT) isoforms OAT1 and OAT3 (Kis = 34.2 and 74.4 μM, respectively for the rat transporters) in S2 proximal tubule cells. Indoxyl sulfate (0.2 and 1 mM) increases superoxide anion and nitric oxide levels in isolated human mononuclear blood cells. It increases serum creatinine and blood urea nitrogen (BUN) levels in the 5/6 nephrectomized rat model of chronic renal failure when administered at a dose of 50 mg/kg.
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## Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.9012 mL	19.5061 mL	39.0122 mL
5 mM	0.7802 mL	3.9012 mL	7.8024 mL
10 mM	0.3901 mL	1.9506 mL	3.9012 mL
50 mM	0.078 mL	0.3901 mL	0.7802 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.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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