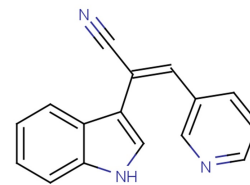


## Paprottrain

## Chemical Properties

CAS No.:	57046-73-8
Formula:	C <sub>16</sub> H <sub>11</sub> N <sub>3</sub>
Molecular Weight:	245.28
Appearance:	N/A
Storage:	0-4°C for short term (days to weeks), or -20°C for long term (months).



## Biological Description

Description	Paprottrain is a cell-permeable the kinesin MKLP-2 inhibitor(inhibits the ATPase activity of MKLP-2 with an IC <sub>50</sub> of 1.35 µM and a K <sub>i</sub> of 3.36 µM )
Targets(IC <sub>50</sub> )	MKLP-2: 1.35 µM
In vitro	Paprottrain-treated porcine oocytes suffer failure of nuclear maturation. The number of oocytes arrested at early MI stage increase in a dose-dependent manner after KIF20A activity inhibition, while the percentage of oocytes that reach ATI and MII stages decrease after treatment[3].

## Solubility Information

Solubility	DMSO: 100 mg/mL (407.70 mM) ( < 1 mg/ml refers to the product slightly soluble or insoluble)
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## Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	4.077 mL	20.385 mL	40.77 mL
5 mM	0.815 mL	4.077 mL	8.154 mL
10 mM	0.408 mL	2.038 mL	4.077 mL
50 mM	0.082 mL	0.408 mL	0.815 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. The storage conditions and period of the stock solution: - 80 °C for 6 months; - 20 °C for 1 month. Please use it as soon as possible.

## Reference

1. Labrière C, et al. Further investigation of Paprottrain: Towards the conception of selective and multi-targeted CNS kinase inhibitors. Eur J Med Chem. 2016 Nov 29;124:920-934.
2. Liu J, et al. MKlp2 inhibitor paprottrain affects polar body extrusion during mouse oocyte maturation. Reprod Biol Endocrinol. 2013 Dec 21;11:117.
3. Zhang Y, et al. KIF20A regulates porcine oocyte maturation and early embryo development.
4. Tcherniuk S, et al. Relocation of Aurora B and survivin from centromeres to the central spindle impaired by a kinesin-specific MKLP-2 inhibitor. Angew Chem Int Ed Engl. 2010 Oct 25;49(44):8228-31.

Inhibitors · Natural Compounds · Compound Libraries

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