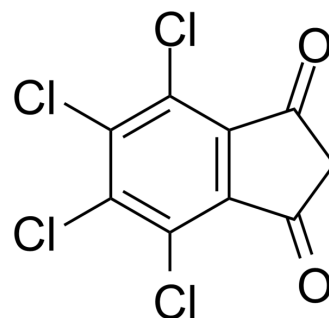


## TCID

Cat. No.:	HY-18638		
CAS No.:	30675-13-9		
Molecular Formula:	C <sub>9</sub> H <sub>2</sub> Cl <sub>4</sub> O <sub>2</sub>		
Molecular Weight:	283.92		
Target:	Deubiquitinase		
Pathway:	Cell Cycle/DNA Damage		
Storage:	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	2 years
		-20°C	1 year



## SOLVENT & SOLUBILITY

In Vitro	DMSO : 20 mg/mL (70.44 mM; Need ultrasonic)				
		Solvent Concentration	Mass 1 mg	5 mg	10 mg
	Preparing Stock Solutions	1 mM	3.5221 mL	17.6106 mL	35.2212 mL
		5 mM	0.7044 mL	3.5221 mL	7.0442 mL
10 mM		0.3522 mL	1.7611 mL	3.5221 mL	
Please refer to the solubility information to select the appropriate solvent.					
In Vivo	1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline Solubility: ≥ 2.08 mg/mL (7.33 mM); Clear solution				

## BIOLOGICAL ACTIVITY

Description	TCID (4,5,6,7-Tetrachloroindan-1,3-dione) is a potent and selective neuronal ubiquitin C-terminal hydrolase (UCH-L3) inhibitor with an IC <sub>50</sub> of 0.6 μM <sup>[1]</sup> . TCID diminishes glycine transporter GlyT2 ubiquitination in brainstem and spinal cord primary neurons <sup>[2]</sup> .
IC <sub>50</sub> & Target	IC <sub>50</sub> : 0.6 μM (UCH-L3) and 75 μM (UCH-L1) <sup>[1]</sup>
In Vitro	TCID (4,5,6,7-Tetrachloroindan-1,3-dione; compound 11) inhibits UCH-L1 with an IC <sub>50</sub> of 75 μM <sup>[1]</sup> . TCID (10 μM; 1, 2 hours) diminishes glycine transporter GlyT2 ubiquitination in brainstem and spinal cord primary neurons <sup>[2]</sup> . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

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## CUSTOMER VALIDATION

- J Nanobiotechnology. 2023 Mar 14;21(1):88.

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## REFERENCES

- [1]. Liu Y, et al. Discovery of inhibitors that elucidate the role of UCH-L1 activity in the H1299 lung cancer cellline. Chem Biol. 2003 Sep;10(9):837-46.
- [2]. de Juan-Sanz J, et al. Constitutive endocytosis and turnover of the neuronal glycine transporter GlyT2 is dependent on ubiquitination of a C-terminal lysine cluster. PLoS One. 2013;8(3):e58863.
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**Caution: Product has not been fully validated for medical applications. For research use only.**

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