

OBA-09

## Chemical Properties

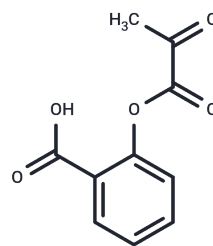
CAS No. : 856095-68-6

Formula: C<sub>10</sub>H<sub>8</sub>O<sub>5</sub>

Molecular Weight: 208.17

Appearance: no data available

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



## Biological Description

Description	OBA-09 is a novel multimodal neuroprotectant oxopropanoyloxy benzoic acid. OBA-09 displays robust protective effects in the postischemic brain.
Targets(IC50)	Others
In vitro	OBA-09 exhibited antioxidative effects in the postischemic brain, which was evidenced by the remarkable reduction of lipid peroxidation and 4-hydroxy-2-nonenal staining in OBA-09-administered animals. OBA-09 was capable of scavenging hydroxyl radical in cell-free assays. High-performance liquid chromatography results demonstrated that OBA-09 was hydrolyzed to salicylic acid and pyruvate with $t_{1/2} = 43$ min in serum and 4.2 h in brain parenchyma, indicating that antioxidative function of OBA-09 is executed by itself and also by salicylic acid after the hydrolysis. In addition to antioxidative function, OBA-09 exerts anti-excitotoxic and anti-Zn <sup>2+</sup> -toxic functions, which might be attributed to attenuation of ATP and nicotinamide adenine dinucleotide depletion and to the suppression of nuclear factor- $\kappa$ B activity induction. Together these results indicate that OBA-09 has a potent therapeutic potential as a multimodal neuroprotectant in the postischemic brain and these effects were conferred by OBA-09 itself and subsequently its hydrolyzed products.

## Solubility Information

Solubility	DMSO: 100 mg/mL (480.38 mM), Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
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## A DRUG SCREENING EXPERT

### Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	4.8038 mL	24.0188 mL	48.0377 mL
5 mM	0.9608 mL	4.8038 mL	9.6075 mL
10 mM	0.4804 mL	2.4019 mL	4.8038 mL
50 mM	0.0961 mL	0.4804 mL	0.9608 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.

### Reference

Kim SW, et al. Robust protective effects of a novel multimodal neuroprotectant oxopropanoyloxy benzoic acid (a salicylic acid/pyruvate ester) in the postischemic brain. Mol Pharmacol. 2011 Feb;79(2):220-8.

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