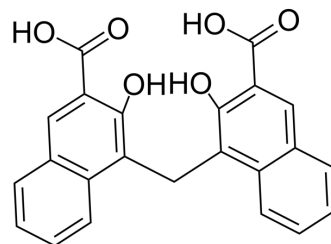


## Pamoic acid

<b>Cat. No.:</b>	HY-W008613
<b>CAS No.:</b>	130-85-8
<b>Molecular Formula:</b>	C <sub>23</sub> H <sub>16</sub> O <sub>6</sub>
<b>Molecular Weight:</b>	388.38
<b>Target:</b>	ERK; GPR35
<b>Pathway:</b>	MAPK/ERK Pathway; Stem Cell/Wnt; GPCR/G Protein
<b>Storage:</b>	4°C, protect from light, stored under nitrogen * In solvent : -80°C, 6 months; -20°C, 1 month (protect from light, stored under nitrogen)



### SOLVENT & SOLUBILITY

#### In Vitro

DMSO : 50 mg/mL (128.74 mM; Need ultrasonic)

Concentration	Solvent	Mass		
		1 mg	5 mg	10 mg
Preparing Stock Solutions	1 mM	2.5748 mL	12.8740 mL	25.7480 mL
	5 mM	0.5150 mL	2.5748 mL	5.1496 mL
	10 mM	0.2575 mL	1.2874 mL	2.5748 mL

Please refer to the solubility information to select the appropriate solvent.

### BIOLOGICAL ACTIVITY

#### Description

Pamoic acid (Embonic acid) is a potent GPR35 agonist with an EC<sub>50</sub> of 79 nM. Pamoic acid exhibits neuroprotective and anti-inflammatory properties<sup>[1][2]</sup>.

#### IC<sub>50</sub> & Target

EC<sub>50</sub>: 79 nM (GPR35)<sup>[1]</sup>

#### In Vitro

GPR35 activation by Pamoic acid may increase the phosphorylation of ERK1/2, which in turn initiates an anti-inflammatory signal by suppressing NF-κB-dependent inflammatory genes<sup>[1]</sup>.

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

#### In Vivo

In a mouse model of stroke, Pamoic acid (s.c.; 50-100 mg/kg) has neuroprotective activity that activates GPR35. Pharmacological inhibition of GPR35 reveals that Pamoic acid reduces infarcts size in a GPR35 dependent manner. Pamoic acid treatment results in a preferential increment of noninflammatory Ly-6Cl<sub>0</sub> monocytes/macrophages in the ischemic brain along with the reduced neutrophil counts<sup>[1]</sup>.

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

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## REFERENCES

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- [1]. Ozayra Sharmin, et al. Activation of GPR35 protects against cerebral ischemia by recruiting monocyte-derived macrophages. *Sci Rep.* 2020 Jun 10;10(1):9400.
- [2]. Pingwei Zhao, et al. Targeting of the orphan receptor GPR35 by pamoic acid: a potent activator of extracellular signal-regulated kinase and  $\beta$ -arrestin2 with antinociceptive activity. *Mol Pharmacol.* 2010 Oct;78(4):560-8.
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**Caution: Product has not been fully validated for medical applications. For research use only.**

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