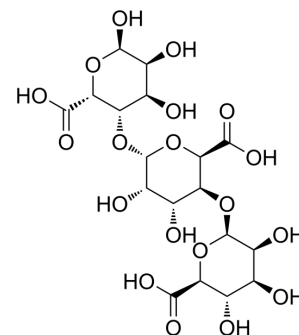


Alginate acid

Cat. No.:	HY-W127758		
CAS No.:	9005-32-7		
Molecular Formula:	C ₁₈ H ₂₆ O ₁₉		
Molecular Weight:	546.39		
Target:	Apoptosis; Autophagy; Histamine Receptor; Endogenous Metabolite		
Pathway:	Apoptosis; Autophagy; GPCR/G Protein; Immunology/Inflammation; Neuronal Signaling; Metabolic Enzyme/Protease		
Storage:	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	6 months
		-20°C	1 month



SOLVENT & SOLUBILITY

In Vitro

H₂O : 3.03 mg/mL (5.55 mM; ultrasonic and adjust pH to 12 with 1M NaOH)

Concentration	Mass		
	1 mg	5 mg	10 mg
1 mM	1.8302 mL	9.1510 mL	18.3019 mL
5 mM	0.3660 mL	1.8302 mL	3.6604 mL
10 mM	---	---	---

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

BIOLOGICAL ACTIVITY

Description

Alginate acid is a natural polysaccharide, which has been widely concerned and applied due to its excellent water solubility, film formation, biodegradability and biocompatibility. Alginate acid induces oxidative stress-mediated hormone secretion disorder, apoptosis and autophagy in mouse granulosa cells and ovaries. Alginate acid has an inhibitory effect on histamine release. Anti-anaphylactic and anti-inflammatory properties^{[1][2][3]}.

IC₅₀ & Target

Human Endogenous Metabolite

In Vitro

Alginate acid (AA) is a kind of polysaccharide extracted from brown seaweeds and has been widely used in food industry^[2]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Guo X, et al. Structures, properties and application of alginate acid: A review. Int J Biol Macromol. 2020;162:618-628.

[2]. Cui J, et al. Alginic acid induces oxidative stress-mediated hormone secretion disorder, apoptosis and autophagy in mouse granulosa cells and ovaries. *Toxicology*. 2022;467:153099.

[3]. Jeong HJ, et al. Alginic acid has anti-anaphylactic effects and inhibits inflammatory cytokine expression via suppression of nuclear factor-kappaB activation. *Clin Exp Allergy*. 2006;36(6):785-794.

Caution: Product has not been fully validated for medical applications. For research use only.

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