

Mastoparan X

Cat. No.:	HY-P2705
CAS No.:	72093-22-2
Molecular Formula:	C ₇₃ H ₁₂₆ N ₂₀ O ₁₅ S
Molecular Weight:	1555.97
Sequence Shortening:	INWKGIAAMAKKLL-NH ₂
Target:	Endogenous Metabolite
Pathway:	Metabolic Enzyme/Protease
Storage:	Sealed storage, away from moisture and light
	Powder -80°C 2 years
	-20°C 1 year

INWKGIAAMAKKLL-NH₂

* In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture and light)

SOLVENT & SOLUBILITY

In Vitro

DMSO : ≥ 100 mg/mL (64.27 mM)

* "≥" means soluble, but saturation unknown.

Concentration	Solvent	Mass	1 mg	5 mg	10 mg
			1 mg	5 mg	10 mg
Preparing Stock Solutions	1 mM		0.6427 mL	3.2134 mL	6.4269 mL
	5 mM		0.1285 mL	0.6427 mL	1.2854 mL
	10 mM		0.0643 mL	0.3213 mL	0.6427 mL

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

BIOLOGICAL ACTIVITY

Description

Mastoparan X is a GTP-binding regulatory protein (G protein)-activating peptide, and a tetradecapeptide from wasp venom. Mastoparan X acts function by the direct activation of G protein that couple to phospholipase C to cause secretion from various kinds of cells^[1].

IC₅₀ & Target

GTP-binding regulatory protein (G protein)^[1]

In Vitro

Mastoparan X (1.5 mM) interacts with phospholipid bicelles, and results the line broadening^[2].

Mastoparan X binds to the membrane, and increases the cell's permeability to cations leading to a disruption in the electrolyte balance and cell lysis^[2].

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

REFERENCES

- [1]. Wakamatsu K, et al. Membrane-bound conformation of mastoparan-X, a G-protein-activating peptide. *Biochemistry*. 1992 Jun 23;31(24):5654-60.
- [2]. Whiles JA, et al. Orientation and effects of mastoparan X on phospholipid bicelles. *Biophys J*. 2001 Jan;80(1):280-93.
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Caution: Product has not been fully validated for medical applications. For research use only.

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