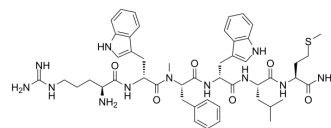


## Antagonist G

Cat. No.:	HY-P1185
CAS No.:	115150-59-9
Molecular Formula:	C <sub>49</sub> H <sub>66</sub> N <sub>12</sub> O <sub>6</sub> S
Molecular Weight:	951.19
Sequence Shortening:	RW-{Me-Phe}-WLM-NH <sub>2</sub>
Target:	Vasopressin Receptor; Apoptosis
Pathway:	GPCR/G Protein; Apoptosis
Storage:	Sealed storage, away from moisture and light
	Powder    -80°C    2 years
	-20°C    1 year



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

### SOLVENT & SOLUBILITY

#### In Vitro

H<sub>2</sub>O : 50 mg/mL (52.57 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent Concentration	Mass	1 mg	5 mg	10 mg
	1 mM		1.0513 mL	5.2566 mL	10.5131 mL
	5 mM		0.2103 mL	1.0513 mL	2.1026 mL
	10 mM		0.1051 mL	0.5257 mL	1.0513 mL

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

### BIOLOGICAL ACTIVITY

#### Description

Antagonist G is a potent vasopressin antagonist. Antagonist G is also a weak antagonist of GRP and Bradykinin. Antagonist G induces AP-1 transcription and sensitizes cells to chemotherapy<sup>[1][2]</sup>.

#### In Vitro

Antagonist G (0-100 μM) induces apoptosis is redox-sensitive and caspase-dependently in SCLC cells<sup>[2]</sup>. Antagonist G activates JNK1 in SCLC cells<sup>[2]</sup>. Antagonist G is not intrinsically a free radical oxygen donor but stimulates free radical generation specifically within SCLC cells (6.2-fold) and increases the activity of the redox-sensitive transcription factor AP-1 by 61%<sup>[2]</sup>. MCE has not independently confirmed the accuracy of these methods. They are for reference only. Cell Viability Assay<sup>[2]</sup>

Cell Line: SCLC cell lines NCI-H69, NCI-H510 and CHO-K1 cells.

Concentration: 0-100 μM.

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Incubation Time:	24 h.
Result:	Inhibited cell growth.

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## REFERENCES

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[1]. P J Woll, et al. A neuropeptide antagonist that inhibits the growth of small cell lung cancer in vitro. Cancer Res. 1990 Jul 1;50(13):3968-73.

[2]. A C MacKinnon, et al. [Arg6, D-Trp7,9, NmePhe8]-substance P (6–11) (antagonist G) induces P-1 transcription and sensitizes cells to chemotherapy. Br J Cancer. 2000 Oct; 83(7): 941–948.

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

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