# Cyclo(glycyl-L-leucyl)

**Cat. No.:** HY-W152604

**CAS No.:** 5845-67-0

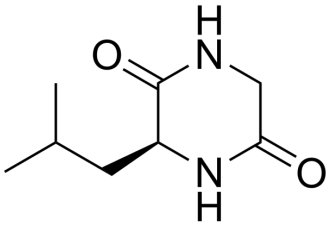
**Molecular Formula:** $C_8H_{14}N_2O_2$

**Molecular Weight:** 170.21

**Target:** Dopamine Receptor

**Pathway:** GPCR/G Protein; Neuronal Signaling

**Storage:** Please store the product under the recommended conditions in the Certificate of Analysis.



## BIOLOGICAL ACTIVITY

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| **Description** | Cyclo(glycyl-L-leucyl) (Cyclo(leu-gly)), a neuropeptide, down-regulates dopamine (DA) receptors and attenuates dopaminergic supersensitivity. Cyclo(glycyl-L-leucyl) inhibits the development of Morphine induced pain relief as well as dopamine receptor supersensitivity in rats. Cyclo(glycyl-L-leucyl) has the potential for the prevention of tardive and/or L-DOPA (HY-N0304)-induced dyskinesias[1][2]. |
| **$IC_{50}$ & Target** | Dopamine Receptor |
| **In Vivo** | Cyclo(glycyl-L-leucyl) (8 mg/kg; s.c.) given 24h after apomorphine (APO) attenuates the DA receptor supersensitivity caused by acute high dose APO (5 mg/kg; s.c.)[1].<br>MCE has not independently confirmed the accuracy of these methods. They are for reference only. |

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| Animal Model: | Male Swiss-Webster mice, 20-25g[1] |
| Dosage: | 8 mg/kg |
| Administration: | SC; single dose given 24h after apomorphine (APO) |
| Result: | Attenuated the DA receptor supersensitivity caused by acute high dose APO (5 mg/kg; s.c.). |

## REFERENCES

[1]. J Z Fields, et al. The effects of cyclo(leucyl-glycyl) on nigrostriatal dopaminergic supersensitivity--inhibition of apomorphine-induced climbing. Neuropeptides. 1990 Aug;16(4):207-11.

[2]. H N Bhargava, et al. Cyclo (leucylglycine) inhibits the development of morphine induced analgesic tolerance and dopamine receptor supersensitivity in rats. Life Sci. 1980 Jul 14;27(2):117-23.

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

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