

CTCE-9908

Cat. No.:	HY-P1103
CAS No.:	1030384-98-5
Molecular Formula:	C ₈₆ H ₁₄₇ N ₂₇ O ₂₃
Molecular Weight:	1927.25
Sequence:	Sequence 1:Lys-Gly-Val-Ser-Leu-Ser-Tyr-Arg-Lys-NH ₂ ;Sequence 1':Lys-Gly-Val-Ser-Leu-Ser-Tyr-Arg (Amide bridge:Lys9-Arg8')
Sequence Shortening:	Sequence 1:KGVLSYRK-NH ₂ ;Sequence 1':KGVLSYR (Amide bridge:Lys9-Arg8')
Target:	CXCR
Pathway:	GPCR/G Protein; Immunology/Inflammation
Storage:	Please store the product under the recommended conditions in the COA.

BIOLOGICAL ACTIVITY

Description	CTCE-9908 is a potent and selective CXCR4 antagonist. CTCE-9908 induces mitotic catastrophe, cytotoxicity and inhibits migration in CXCR4-expressing ovarian cancer cells ^{[1][2]} .
IC ₅₀ & Target	CXCR4
In Vitro	CTCE-9908 (0-300 µg/mL; for 10 d) inhibits migration and growth in CXCR4-expressing in ovarian cancer cell lines (IGROV, TOV21G and SKOV3). CTCE-9908 inhibits ovarian cancer cell migration to CXCL12. CTCE-9908 does not cause apoptosis or cellular senescence, but induces multinucleation, G2-M arrest, and abnormal mitosis in ovarian cancer cells. CTCE-9908 deregulates DNA damage checkpoint proteins and spindle assembly checkpoint proteins at G2-M phases of the cell cycle ^[1] .
In Vivo	CTCE-9908 (25, 50 and 100 mg/kg; s.c.; 5 days per week for 4.5 weeks) alone slows the rate of primary breast tumor growth, with a 45% inhibition of primary tumor growth at 3.5 weeks of treatment with 50 mg/kg in FVB/N TgN (MMTV-PyMT) ⁶³⁴ male mice ^[2] .

REFERENCES

- [1]. Joseph Kwong, et al. An antagonist of the chemokine receptor CXCR4 induces mitotic catastrophe in ovarian cancer cells. *Mol Cancer Ther.* 2009 Jul;8(7):1893-905.
- [2]. Saima Hassan, et al. CXCR4 peptide antagonist inhibits primary breast tumor growth, metastasis and enhances the efficacy of anti-VEGF treatment or docetaxel in a transgenic mouse model. *Int J Cancer.* 2011 Jul 1;129(1):225-32.

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

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