

## Leronlimab

Cat. No.:	HY-P99697
CAS No.:	674782-26-4
Molecular Weight:	146.7 kDa
Target:	CCR; HIV
Pathway:	GPCR/G Protein; Immunology/Inflammation; Anti-infection
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.

### BIOLOGICAL ACTIVITY

<b>Description</b>	Leronlimab (PRO 140) is a humanized IgG4 anti-CCR5 monoclonal antibody. Leronlimab inhibits CCR5-mediated HIV-1 viral and lung metastasis in mouse tumor models. Leronlimab can be used for the research of HIV nonalcoholic steatohepatitis (NASH) and cancer <sup>[1]</sup> .									
<b>IC<sub>50</sub> &amp; Target</b>	CCR5/CD195									
<b>In Vitro</b>	<p>Leronlimab (1-140 mg/mL) binds to CCR5-positive cells up to 98%<sup>[1]</sup>.            Leronlimab (80-1750 µg/mL) blocks CCL5, CCL3, and CCL4-induced calcium responses in MDA-MB-231-CCR5 cells<sup>[1]</sup>.            Leronlimab (175 and 350 mg/mL) blocks MDA-MB-231 cell invasion<sup>[1]</sup>.            Leronlimab (10 µg/mL; 72 hours) enhances the cytotoxicity of doxorubicin for MDA-MB-231 cells<sup>[1]</sup>.            MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p> <p>Cell Cytotoxicity Assay<sup>[1]</sup></p> <table border="1"> <tr> <td>Cell Line:</td> <td>MDA-MB-231 cell line</td> </tr> <tr> <td>Concentration:</td> <td>10 µg/mL</td> </tr> <tr> <td>Incubation Time:</td> <td>72 hours</td> </tr> <tr> <td>Result:</td> <td>Increased the cells killing effect induced by doxorubicin.</td> </tr> </table>		Cell Line:	MDA-MB-231 cell line	Concentration:	10 µg/mL	Incubation Time:	72 hours	Result:	Increased the cells killing effect induced by doxorubicin.
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<b>In Vivo</b>	<p>Leronlimab (2 mg; i.p., twice a week) reduces lung metastasis in murine xenograft models<sup>[1]</sup>.            MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p> <table border="1"> <tr> <td>Animal Model:</td> <td>Female NCI Athymic nu/nu nude mice with MB-MDA-231 cells expressing Luc2-eGFP injection<sup>[1]</sup></td> </tr> <tr> <td>Dosage:</td> <td>2 mg</td> </tr> <tr> <td>Administration:</td> <td>Intraperitoneal injection; 2 mg, twice a week</td> </tr> <tr> <td>Result:</td> <td>Reduced the volume of pulmonary metastases at 8 weeks.</td> </tr> </table>		Animal Model:	Female NCI Athymic nu/nu nude mice with MB-MDA-231 cells expressing Luc2-eGFP injection <sup>[1]</sup>	Dosage:	2 mg	Administration:	Intraperitoneal injection; 2 mg, twice a week	Result:	Reduced the volume of pulmonary metastases at 8 weeks.
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## REFERENCES

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[1]. Jiao X, et al. Leronlimab, a humanized monoclonal antibody to CCR5, blocks breast cancer cellular metastasis and enhances cell death induced by DNA damaging chemotherapy. Breast Cancer Res. 2021 Jan 23;23(1):11.

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

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