

## Lanreotide diTFA

<b>Cat. No.:</b>	HY-P1959B
<b>CAS No.:</b>	1024499-83-9
<b>Molecular Formula:</b>	C <sub>58</sub> H <sub>71</sub> F <sub>6</sub> N <sub>11</sub> O <sub>14</sub> S <sub>2</sub>
<b>Molecular Weight:</b>	1324.37
<b>Sequence Shortening:</b>	{d-2nal}-CY-{d-Trp}-KVCT-NH2 (Disulfide bridge: Cys2-Cys7)
<b>Target:</b>	Others
<b>Pathway:</b>	Others
<b>Storage:</b>	Please store the product under the recommended conditions in the Certificate of Analysis.

### BIOLOGICAL ACTIVITY

<b>Description</b>	Lanreotide (BIM 23014) diTFA is a somatostatin analogue with antineoplastic activity. Lanreotide diTFA can be used for the research of carcinoid syndrome <sup>[1][2]</sup> .								
<b>In Vitro</b>	<p>Lanreotide (BIM 23014) (100 nM; 0-48 h) enhanced radiation-induced apoptosis<sup>[1]</sup>.            Lanreotide results in a dose-dependent decrease in GH3 cell colony forming units. Lanreotide at concentrations of 1, 10, 100, and 1000 nM results in cell survival rates of 75, 56, 39 and 27% respectively. The IC<sub>50</sub> is 57 nM<sup>[1]</sup>.            Lanreotide inhibits GH-secreting pituitary adenoma cell proliferation and hormone release in vitro<sup>[2]</sup>.            MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p> <p>Apoptosis Analysis<sup>[1]</sup></p> <table> <tr> <td>Cell Line:</td> <td>GH3</td> </tr> <tr> <td>Concentration:</td> <td>100 nM</td> </tr> <tr> <td>Incubation Time:</td> <td>48 h, 24 h, or immediately (0 h) before radiation</td> </tr> <tr> <td>Result:</td> <td>Increased apoptotic sub-G1 proportion compared with radiation alone.</td> </tr> </table>	Cell Line:	GH3	Concentration:	100 nM	Incubation Time:	48 h, 24 h, or immediately (0 h) before radiation	Result:	Increased apoptotic sub-G1 proportion compared with radiation alone.
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<b>In Vivo</b>	<p>Lanreotide (2.5-10mg/kg; s.c.; daily for 5 days) results in tumor growth inhibition<sup>[1]</sup>.            MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p> <table> <tr> <td>Animal Model:</td> <td>Male nude mice, 8 weeks old and 20–25 g in body weight (GH3 tumor-bearing nude mice) [1]</td> </tr> <tr> <td>Dosage:</td> <td>2.5, 5, 10 mg/kg</td> </tr> <tr> <td>Administration:</td> <td>Subcutaneous; daily for 5 days</td> </tr> <tr> <td>Result:</td> <td>Produced tumor growth inhibition.</td> </tr> </table>	Animal Model:	Male nude mice, 8 weeks old and 20–25 g in body weight (GH3 tumor-bearing nude mice) [1]	Dosage:	2.5, 5, 10 mg/kg	Administration:	Subcutaneous; daily for 5 days	Result:	Produced tumor growth inhibition.
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### REFERENCES

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[1]. Ning S, et al. Lanreotide promotes apoptosis and is not radioprotective in GH3 cells. *Endocr Relat Cancer*. 2009 Sep;16(3):1045-55.

[2]. Florio T, et al. Characterization of the intracellular mechanisms mediating somatostatin and lanreotide inhibition of DNA synthesis and growth hormone release from dispersed human GH-secreting pituitary adenoma cells in vitro. *Clin Endocrinol (Oxf)*. 2003 Jul;59(1):115-28.

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

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