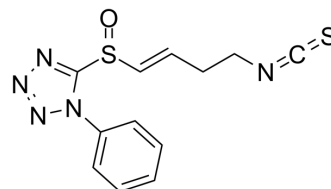


LFS-1107

| | |
|---------------------------|---|
| Cat. No.: | HY-157136 |
| CAS No.: | 1799330-91-8 |
| Molecular Formula: | C ₁₂ H ₁₁ N ₅ OS ₂ |
| Molecular Weight: | 305.38 |
| Target: | CRM1; COX; c-Myc; Survivin |
| Pathway: | Membrane Transporter/Ion Channel; Immunology/Inflammation; Apoptosis |
| Storage: | Please store the product under the recommended conditions in the Certificate of Analysis. |



BIOLOGICAL ACTIVITY

| | | | | | | | | | | | | | | | | | | | |
|-------------------------------------|---|------------|--------------|----------------|----------|------------------|------|---------|---|------------|------|----------------|--|------------------|-----|---------|--|------------|------------|
| Description | LFS-1107 is a reversible CRM1 inhibitor (K _d : 12.5 pM). LFS-1107 can selectively eliminate extranodal natural killer/T cell lymphoma (ENKTL) cells and can be used for cancer research ^[1] . | | | | | | | | | | | | | | | | | | |
| IC₅₀ & Target | COX-2 | | | | | | | | | | | | | | | | | | |
| In Vitro | <p>LFS-1107 (4-9 μM, 72 h) can selectively eliminate ENKTL cells while sparing normal human PBMC with good safety profile in PBMC cell lines^[1].</p> <p>LFS-1107 (0.15-500 μM, 24 h) barely exhibits any effects in human platelets^[1].</p> <p>LFS-1107 (50-200 nM, 3 h) can lead to nuclear accumulation IκBα in 293T cells^[1].</p> <p>MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p> <p>Cell Viability Assay^[1]</p> <table border="1"> <tr> <td>Cell Line:</td> <td>SNK6, HANK-1</td> </tr> <tr> <td>Concentration:</td> <td>0-800 nM</td> </tr> <tr> <td>Incubation Time:</td> <td>72 h</td> </tr> <tr> <td>Result:</td> <td>Achieved IC₅₀ value of 26 nM in SNK6 cell line and 36 nM in HANK-1 cell line.</td> </tr> </table> <p>Western Blot Analysis^[1]</p> <table border="1"> <tr> <td>Cell Line:</td> <td>SNK6</td> </tr> <tr> <td>Concentration:</td> <td>62.5 nM, 125 nM, 250 nM, 500 nM, 1000 nM</td> </tr> <tr> <td>Incubation Time:</td> <td>3 h</td> </tr> <tr> <td>Result:</td> <td>Suppressed the expression of CRM1 in a dose-dependent manner. Downregulated the expression of proinflammatory and proliferative proteins p65, COX-2, c-Myc, and Survivin in a dose dependent manner.</td> </tr> </table> <p>Immunofluorescence^[1]</p> <table border="1"> <tr> <td>Cell Line:</td> <td>293T cells</td> </tr> </table> | Cell Line: | SNK6, HANK-1 | Concentration: | 0-800 nM | Incubation Time: | 72 h | Result: | Achieved IC ₅₀ value of 26 nM in SNK6 cell line and 36 nM in HANK-1 cell line. | Cell Line: | SNK6 | Concentration: | 62.5 nM, 125 nM, 250 nM, 500 nM, 1000 nM | Incubation Time: | 3 h | Result: | Suppressed the expression of CRM1 in a dose-dependent manner. Downregulated the expression of proinflammatory and proliferative proteins p65, COX-2, c-Myc, and Survivin in a dose dependent manner. | Cell Line: | 293T cells |
| Cell Line: | SNK6, HANK-1 | | | | | | | | | | | | | | | | | | |
| Concentration: | 0-800 nM | | | | | | | | | | | | | | | | | | |
| Incubation Time: | 72 h | | | | | | | | | | | | | | | | | | |
| Result: | Achieved IC ₅₀ value of 26 nM in SNK6 cell line and 36 nM in HANK-1 cell line. | | | | | | | | | | | | | | | | | | |
| Cell Line: | SNK6 | | | | | | | | | | | | | | | | | | |
| Concentration: | 62.5 nM, 125 nM, 250 nM, 500 nM, 1000 nM | | | | | | | | | | | | | | | | | | |
| Incubation Time: | 3 h | | | | | | | | | | | | | | | | | | |
| Result: | Suppressed the expression of CRM1 in a dose-dependent manner. Downregulated the expression of proinflammatory and proliferative proteins p65, COX-2, c-Myc, and Survivin in a dose dependent manner. | | | | | | | | | | | | | | | | | | |
| Cell Line: | 293T cells | | | | | | | | | | | | | | | | | | |

| | | |
|----------------|--|---|
| | Concentration: | 50 nM, 100 nM, 200 nM |
| | Incubation Time: | 3 h |
| | Result: | Could lead to nuclear accumulation of I κ B α in a dose dependent manner. |
| In Vivo | LFS-1107 (10 mg/kg, Intraperitoneal injection,once a week) can ameliorate the symptoms of ENKTL in SNK6 cell xenograft mouse model ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only. | |
| | Animal Model: | SNK6 cell xenograft mouse model ^[1] |
| | Dosage: | 10 mg/kg |
| | Administration: | Intraperitoneal injection (i.p.), once a week |
| | Result: | Extended mouse survival and Eliminated tumor cells. |

REFERENCES

[1]. He Liu, et al. Discovery and biological evaluation of a potent small molecule CRM1 inhibitor for its selective ablation of extranodal NK/T cell lymphoma eLife 12:e80625.

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

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