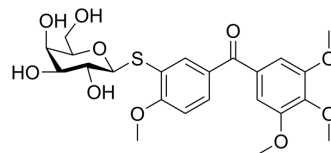


Antibacterial agent 130

| | |
|--------------------|---|
| Cat. No.: | HY-152175 |
| CAS No.: | 1502721-60-9 |
| Molecular Formula: | C ₂₃ H ₂₈ O ₁₀ S |
| Molecular Weight: | 496.53 |
| Target: | Bacterial |
| Pathway: | Anti-infection |
| Storage: | Please store the product under the recommended conditions in the Certificate of Analysis. |



BIOLOGICAL ACTIVITY

| | |
|--------------------|---|
| Description | Antibacterial agent 130 is a 1,1-diarylthiogalactoside, used for targeting the <i>Pseudomonas aeruginosa</i> LecA. Antibacterial agent 130 shows high affinity toward LecA ($K_d=1 \mu\text{M}$). Antibacterial agent 130 has antibiofilm activity, but lacks bactericidal activity. LecA, a lectin and virulence factor from <i>Pseudomonas aeruginosa</i> involved in bacterial adhesion and biofilm formation ^[1] . |
| In Vitro | Antibacterial agent 130 (compound 8a) (0.08-5 mM; 2-24 h) dose-dependently inhibits bacterial biofilm formation with 100% of inhibition at 5 mM ^[1] . Antibacterial agent 130 (0.01-5 mM; 24 h) has cytotoxicity against MRC-5 cell line (human fetal lung fibroblast cells) at concentration higher than 1.25 mM ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only. |

REFERENCES

[1]. Bruneau A, et al. Discovery of potent 1,1-diarylthiogalactoside glycomimetic inhibitors of *Pseudomonas aeruginosa* LecA with antibiofilm properties. *Eur J Med Chem.* 2022 Dec 15;247:115025.

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

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