

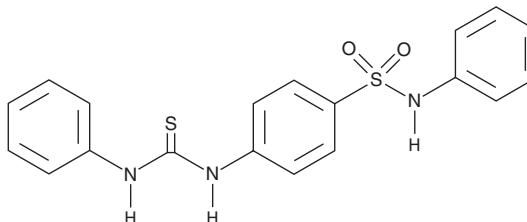
PRODUCT INFORMATION



LED209

Item No. 16844

CAS Registry No.: 245342-14-7
Formal Name: N-phenyl-4-[[[(phenylamino)thioxomethyl]amino]benzenesulfonamide
MF: $C_{19}H_{17}N_3O_2S_2$
FW: 383.5
Purity: $\geq 98\%$
UV/Vis.: λ_{max} : 295 nm
Supplied as: A crystalline solid
Storage: $-20^{\circ}C$
Stability: ≥ 4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

LED209 is supplied as a crystalline solid. A stock solution may be made by dissolving the LED209 in the solvent of choice. LED209 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide, which should be purged with an inert gas. The solubility of LED209 in these solvents is approximately 0.15, 20, and 25 mg/ml, respectively.

Description

Bacterial pathogens require the conserved membrane histidine sensor kinase (QseC) to detect both host-derived adrenergic signals and the bacterial autoinducer-3 (AI-3), thus activating a signaling cascade that induces virulence gene expression.¹ LED209 is a potent QseC inhibitor that blocks both norepinephrine- and epinephrine-triggered QseC-dependent virulence gene expression at 5 pM *in vitro*.² While LED209 inhibits virulence of enterohemorrhagic *E. coli*, *S. typhimurium*, and *F. tularensis*, it does not inhibit pathogen growth, a highly desirable feature of antimicrobial agents to prevent drug resistance.²

References

1. Sperandio, V., Torres, A.G., Jarvis, B., *et al.* Bacteria-host communication: The language of hormones. *Proc. Natl. Acad. Sci. USA* **100**(15), 8951-8956 (2003).
2. Rasko, D.A., Moreira, C.G., Li, D.R., *et al.* Targeting QseC signaling and virulence for antibiotic development. *Science* **321**(5892), 1078-1080 (2008).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

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