



Synthetic Ligands that Modulate the Activity of the RhIR Quorum Sensing Receptor

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WARF: P160350US02

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The Invention

UW Madison researchers have developed RhIR modulators including agonist and antagonists which are useful for modulating QS phenotypes in Gram-negative bacteria. Certain compounds of general formula A-W-HG having various carbocyclic and heterocyclic head groups (HG) and various tail groups (A), where -W- is -CO-NH-, -SO₂-NH-, -CO-NH-CH₂-, or -SO₂-NH-CH₂- are RhIR agonists or antagonists. The compounds are useful in methods of modulating quorum sensing in Gram-negative bacteria, particularly in *Pseudomonas*. Compositions including certain RhIR modulators are useful for decreasing the virulence of Gram-negative bacteria. Pharmaceutical compositions comprising certain RhIR modulators are useful for treatment of infections of Gram-negative bacteria.

Additional Information

For More Information About the Inventors

- [Helen Blackwell](#)

Tech Fields

- [Therapeutics & Vaccines : Anti-infectives \(antibacterials, antifungals, antivirals\)](#)

For current licensing status, please contact Rafael Diaz at rdiaz@warf.org or 608-960-9847