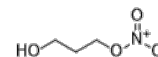


Product Name : 3-Nitrooxypropanol
Cat. No. : PC-25841
CAS No. : 100502-66-7
Molecular Formula : C₃H₇NO₄
Molecular Weight : 121.09
Target : Other Targets
Solubility : 10 mM in DMSO



Biological Activity

3-Nitrooxypropanol (Abrucomstat, 3-NOP) is a small molecule inhibitor of methane formation in the rumen, specifically inhibits methyl-coenzyme M reductase (MCR), inhibit methanogenesis, in vitro and in vivo.

3-Nitrooxypropanol (3-NOP) persistently decreases enteric methane emissions from sheep, dairy cows, and beef cattle without apparent negative side effects.

3-Nitrooxypropanol (3-NOP) increase body weight gain significantly without negatively affecting feed intake nor milk production and composition.

3-Nitrooxypropanol (3-NOP) inhibits growth of two methanogenic archaea on H₂ (80%) and CO₂ (20%).

3-Nitrooxypropanol (3-NOP) is highly specific toward methanogenic archaea.

References

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Liu Z, et al. Appl Environ Microbiol. 2022 Mar 22;88(6):e0190821.

Pitta DW, et al. Microbiome. 2022 Sep 13;10(1):146.

Caution: Product has not been fully validated for medical applications. Lab Use Only!

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