

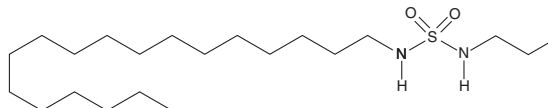
# PRODUCT INFORMATION



## N-Octadecyl-N'-propyl-sulfamide

Item No. 10009661

CAS Registry No.: 925891-74-3  
Formal Name: N-octadecyl-N'-propyl-sulfamide  
MF:  $C_{21}H_{46}N_2O_2S$   
FW: 390.7  
Purity:  $\geq 95\%$   
Supplied as: A crystalline solid  
Storage:  $-20^{\circ}C$   
Stability:  $\geq 2$  years



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

### Laboratory Procedures

N-Octadecyl-N'-propyl-sulfamide is supplied as a crystalline solid. A stock solution may be made by dissolving the N-octadecyl-N'-propyl-sulfamide in the solvent of choice, which should be purged with an inert gas. N-Octadecyl-N'-propyl-sulfamide is soluble in the organic solvent ethanol at a concentration of approximately 0.2 mg/ml.

### Description

Peroxisome proliferator-activated receptors (PPARs) play an essential role in regulating lipid and glucose metabolism. Oleoyl ethanolamide (OEA), a natural ligand for PPAR $\alpha$ , has been shown to suppress food intake and reduce weight gain in rats when administered systemically at 10 mg/kg intraperitoneally.<sup>1,2</sup> N-Octadecyl-N'-propyl-sulfamide is an analog of OEA with selective binding affinity for PPAR $\alpha$ . It is a more potent activator of PPAR $\alpha$ , exhibiting an EC<sub>50</sub> value of 100 nM, compared to OEA, which exhibits an EC<sub>50</sub> value of 120 nM.<sup>2,3</sup> At a dose of 1 mg/kg for 8-11 days, N-octadecyl-N'-propyl-sulfamide induces satiety, thereby decreasing food-intake, body weight, and plasma triglyceride concentration in free-feeding Wistar and obese Zucker (fa/fa) rats.<sup>3</sup>

### References

1. de Fonseca, F.R., Navarro, M., Gómez, R., *et al.* An anorexic lipid mediator regulated by feeding. *Nature* **414(6860)**, 209-212 (2001).
2. Fu, J., Gaetani, S., Oveisi, F., *et al.* Oleylethanolamide regulates feeding and body weight through activation of the nuclear receptor PPAR- $\alpha$ . *Nature* **425(6953)**, 90-93 (2003).
3. Cano, C., Pavón, J., Serrano, A., *et al.* Novel sulfamide analogs of oleylethanolamide showing in vivo satiety inducing actions and PPAR $\alpha$  activation. *J. Med. Chem.* **50(2)**, 389-393 (2007).

#### 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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