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## Product Data Sheet

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Product Name: Sulfosuccinimidyl oleate

Cat. No.: GC31964

**Chemical Properties**

Cas. No. 135661-44-8

SMILES O=S(C(C1)C(N(OC(CCCCCC/C=C\CCCCCCCC)=O)C1=O)=O)(O)=OFormula C<sub>22</sub>H<sub>37</sub>NO<sub>7</sub>S M.Wt 459.6

Solubility Soluble in DMSO Storage Store at -20°C

General tips For obtaining a higher solubility , please warm the tube at 37 °C and shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.

Shipping Condition Evaluation sample solution : ship with blue ice All other available size: ship with RT , or blue ice upon request.

Structure **Background**

Sulfosuccinimidyl oleate (SSO) is an irreversible inhibitor of the fatty acid translocase CD36, blocking uptake of oleate, linoleate, or stearate by about 65% when added at 200 μM to adipocytes.<sup>1,2</sup> It reduces the uptake of palmitate by mouse insulinoma MIN6 cells, preventing palmitate-induced changes in insulin secretion.<sup>3</sup> SSO impairs saturated fatty acid-induced lipid accumulation and inflammation in RAW 264.7 macrophages.<sup>4</sup>

1. Harmon, C.M., Luce, P., Beth, A.H., et al. Labeling of adipocyte membranes by sulfo-N-succinimidyl derivatives of long-chain fatty acids: Inhibition of fatty acid transport. *Membr. Biol.* 121(3)261-268(1991) 2. Abumrad, N.A., el-Maghrabi, M.R., Amri, E.Z., et al. Cloning of a rat adipocyte membrane protein implicated in binding or transport of long-chain fatty acids that is induced during preadipocyte differentiation. Homology with human CD36. *J. Biol. Chem.* 268(24)17665-17668(1993) 3. Noushmehr, H., D'Amico, E., Farilla, L., et al. Fatty acid translocase (FAT/CD36) is localized on insulin-containing granules in human pancreatic β-cells and mediates fatty acid effects on insulin secretion. *Diabetes* 54(2)472-481(2005) 4. Nicholls, H.T., Kowalski, G., Kennedy, D.J., et al. Hematopoietic cell-restricted deletion of CD36 reduces high-fat diet-induced

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

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macrophage infiltration and improves insulin signaling in adipose  
tissueDiabetes60(4)1100-1110(2011)

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