

## Product Datasheet

### 12-Nitrolinoleate (orb3027428)

<b>Catalog Number</b>	orb3027428
<b>Category</b>	Small Molecules
<b>Description</b>	<p>12-Nitrolinoleate is a linoleic acid derivative that acts as an agonist of peroxisome proliferator-activated receptor <math>\gamma</math> (PPAR<math>\gamma</math>). Formed via exposure to acidified nitrite, it is present in human red blood cells and plasma. This compound stimulates PPAR<math>\gamma</math>-dependent gene expression, demonstrated in a reporter assay with MCF-7 cells expressing human PPAR<math>\gamma</math>, with an EC<sub>50</sub> of 0.045 <math>\mu</math>M. At 2.5 <math>\mu</math>M, 12-Nitrolinoleate reduces the secretion of IL-6, TNF-<math>\alpha</math>, and chemokine (C-C motif) ligand 2 (CCL2) in THP-1 and RAW 264.7 macrophages, and it suppresses LPS-induced NF-<math>\kappa</math>B transcriptional activity in RAW 264.7 macrophages. Additionally, it inhibits TNF-<math>\alpha</math>-induced increases in vascular cell adhesion molecule-1 (VCAM-1) in human umbilical vein endothelial cells (HUVECs) and enhances heme oxygenase-1 (HO-1) levels in primary human aortic endothelial cells at concentrations of 1, 5, or 10 <math>\mu</math>M.</p>
<b>Target</b>	Interleukin,Others,TNF,NF- $\kappa$ B,PPAR
<b>MW</b>	325.44
<b>CAS Number</b>	774603-05-3
<b>Formula</b>	C <sub>18</sub> H <sub>31</sub> NO <sub>4</sub>
<b>SMILES</b>	C(\C/C=C\CCCCCCCC(O)=O)(=C\CCCC)/N(=O)=O
<b>Storage</b>	-20°C
<b>Note</b>	For research use only
<b>Expiration Date</b>	12 months from date of receipt.

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