

## Product Datasheet

### Norbixin hydrate (orb1979951)

<b>Description</b>	Norbixin, a carotenoid found in <i>B. orellana</i> , exhibits various biological activities including binding to the peroxisome proliferator-activated receptor $\gamma$ (PPAR $\gamma$ ) with a $K_i$ of 1.15 $\mu$ M in a cell-free assay. At a dosage of 47.7 mg/kg, norbixin effectively alleviates hyperglycemia, hyperinsulinemia, and insulin resistance, in addition to reducing serum lipid levels, cardiac thiobarbituric acid reactive substances (TBARS), and glutathione (GSH) in rat cardio-metabolic syndrome models. It also lowers serum levels of oxidized LDL, aortic protein oxidation, and the atherosclerotic area in a rabbit cholesterol-induced atherosclerosis model. Furthermore, norbixin, administered at 0.1 and 1 mg/kg per day, minimizes mercury-induced DNA damage in rat hepatocytes and leukocytes and prevents photoreceptor degeneration in an <i>Abca4</i> <sup>-/-</sup> <i>Rdh8</i> <sup>-/-</sup> mouse model of age-related macular degeneration (AMD).
<b>Storage</b>	-20°C
<b>Note</b>	For research use only
<b>Formula</b>	$C_{24}H_{28}O_4 \cdot XH_2O$
<b>Purity</b>	98.00%
<b>MW</b>	380.48
<b>SMILES</b>	<chem>OC(/C=C/C(C)=C/C=C/C(C)=C/C=C/C=C(C)/C=C/C=C(C)/C=C/C(O)=O)=O</chem>
<b>Expiration Date</b>	12 months from date of receipt.

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