

## Product Datasheet

### MGL-3196 (orb1223645)

<b>Catalog Number</b>	orb1223645
<b>Category</b>	Small Molecules
<b>Description</b>	<p>MGL-3196 (VIA-3196, Resmetirom) is a potent and highly selective agonist of THR-β (Thyroid Hormone Receptor β) with EC50 of 0.21 μM; shows 28-fold selectivity for THR-β over THR-α in a functional assay; exhibits an excellent safety profile and orally bioactive. Steatohepatitis, Phase 2 Clinical (In Vitro): Resmetirom (MGL-3196) is 28-fold selective for THR-β (EC50=0.21 μM) over THR-α (EC50=3.74 μM) in a functional assay. Resmetirom (MGL-3196) shows an IC20 of roughly 30 μM for blockage of the hERG channel. The IC50 for CYP3A4/5 and for CYP2C19 is &gt;50 μM, and there is only weak inhibition (roughly 22 μM) of CYP2C9. (In Vivo): Resmetirom (MGL-3196) exhibits good exposures and reasonable oral bioavailability in rats. The volume of distribution and clearance are both low. Dose proportional increases in exposure are observed for a suspension of Resmetirom (MGL-3196) given orally to DIO mice. In animals treated with Resmetirom (MGL-3196) there is a reduction in cholesterol and in liver size, which is secondary to reduction of liver TG. There is no effect on bone mineral density (BMD) or heart or kidney size in Resmetirom (MGL-3196) treated animals.</p>
<b>Target</b>	THR
<b>Purity</b>	>98% (HPLC)
<b>MW</b>	435.221
<b>Target Areas</b>	THR-β
<b>Solubility (25°C)</b>	DMSO: ≥ 31 mg/mL
<b>CAS Number</b>	920509-32-6
<b>Formula</b>	C <sub>17</sub> H <sub>12</sub> Cl <sub>2</sub> N <sub>6</sub> O <sub>4</sub>

#### Biorbyt Ltd.

7 Signet Court, Swann Road  
Cambridge  
CB5 8LA  
United Kingdom

Email: [info@biorbyt.com](mailto:info@biorbyt.com), [support@biorbyt.com](mailto:support@biorbyt.com)  
Phone: +44 (0)1223 859353 | Fax: +1 (415) 651-8558

#### Biorbyt LLC

68 TW Alexander Drive  
Research Triangle Park  
Durham  
NC 27713  
United States

Email: [info@biorbyt.com](mailto:info@biorbyt.com), [support@biorbyt.com](mailto:support@biorbyt.com)  
Phone: +1 (415) 906-5211 | Fax: +1 (415) 651-8558

<b>SMILES</b>	<chem>N#CC1=NN(C2=CC(Cl)=C(OC(C=C3C(C)C)=NNC3=O)C(Cl)=C2)C(NC1=O)=O</chem>
<b>Chemical Name</b>	1,2,4-Triazine-6-carbonitrile, 2-[3,5-dichloro-4-[[1,6-dihydro-5-(1-methylethyl)-6-oxo-3-pyridazinyl]oxy]phenyl]-2,3,4,5-tetrahydro-3,5-dioxo-
<b>Storage</b>	Storage temperature: -20°C. Stability: ≥ 2 years
<b>Note</b>	For research use only
<b>Expiration Date</b>	12 months from date of receipt.

**Biorbyt Ltd.**

7 Signet Court, Swann Road  
Cambridge  
CB5 8LA  
United Kingdom

Email: [info@biorbyt.com](mailto:info@biorbyt.com), [support@biorbyt.com](mailto:support@biorbyt.com)

Phone: [+44 \(0\)1223 859353](tel:+44(0)1223859353) | Fax: [+1 \(415\) 651-8558](tel:+1(415)651-8558)

**Biorbyt LLC**

68 TW Alexander Drive  
Research Triangle Park  
Durham  
NC 27713  
United States

Email: [info@biorbyt.com](mailto:info@biorbyt.com), [support@biorbyt.com](mailto:support@biorbyt.com)

Phone: [+1 \(415\) 906-5211](tel:+1(415)906-5211) | Fax: [+1 \(415\) 651-8558](tel:+1(415)651-8558)