

## **Data Sheet**

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 Product Name
 :
 ML224

 Cat. No.
 :
 PC-43013

 CAS No.
 :
 1338824-21-7

 Molecular Formula
 :
 C<sub>31</sub>H<sub>31</sub>N<sub>3</sub>O<sub>5</sub>

 Molecular Weight
 :
 525.5949

Target : Thyrotropin Receptor Solubility : 10 mM in DMSO

## **Biological Activity**

ML224 (NCGC00242364, ANTAG3) is a potent selective thyroid stimulating hormone receptor (**TSHR**) inverse agonist, selectively inhibits TSH-stimulated cAMP production with IC50 of 2.3 uM.

ML224 (NCGC00242364, ANTAG3) inhibits TSHR basal activity with IC50 of 6.0 uM, displays >20-fold selectivity over LHR and FSHR.

ML224 (NCGC00242364, ANTAG3) inhibits stimulation of thyroid function in female mice.

ML224 (NCGC00242364, ANTAG3) is a potential lead for development of drugs to treat TSHR-mediated hyperthyroidism caused by constitutively activating mutations or stimulating auto-antibodies associated with Graves' disease.

## References

Neumann S, et al. Endocrinology. 2014 Jan;155(1):310-4.

Caution: Product has not been fully validated for medical applications. Lab Use Only!

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