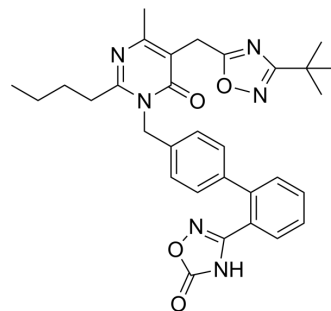


## BR102375

<b>Cat. No.:</b>	HY-128344
<b>CAS No.:</b>	2366255-59-4
<b>Molecular Formula:</b>	C <sub>31</sub> H <sub>34</sub> N <sub>6</sub> O <sub>4</sub>
<b>Molecular Weight:</b>	554.64
<b>Target:</b>	PARP; Apoptosis
<b>Pathway:</b>	Cell Cycle/DNA Damage; Epigenetics; Apoptosis
<b>Storage:</b>	Please store the product under the recommended conditions in the Certificate of Analysis.



### BIOLOGICAL ACTIVITY

<b>Description</b>	BR102375 is a non-TZD peroxisome proliferator-activated receptor $\gamma$ (PPAR $\gamma$ ) full agonist for the treatment of type 2 diabetes, reveals EC <sub>50</sub> value of 0.28 $\mu$ M and A <sub>max</sub> ratio of 98% <sup>[1]</sup> .								
<b>In Vitro</b>	<p>BR102375 (Compound 18) (10 <math>\mu</math>M) increases gene expression levels relevant to PPAR<math>\gamma</math> activation and enhances glucose uptake under insulin stimulation<sup>[1]</sup>.</p> <p>BR102375 (Compound 18) (10 nM, 100 nM, 1 <math>\mu</math>M; 6 days, 14 days) shows a concentration-dependent, insulin-sensitive effects on adipogenesis<sup>[1]</sup>.</p> <p>MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p> <p>RT-PCR<sup>[1]</sup></p> <table border="1"> <tr> <td>Cell Line:</td> <td>3T3-L1 mouse preadipocyte cells</td> </tr> <tr> <td>Concentration:</td> <td>10 <math>\mu</math>M</td> </tr> <tr> <td>Incubation Time:</td> <td></td> </tr> <tr> <td>Result:</td> <td>Increased AP2 and CD36 cells gene mRNA expression and enhanced glucose uptake when stimulated by insulin.</td> </tr> </table>	Cell Line:	3T3-L1 mouse preadipocyte cells	Concentration:	10 $\mu$ M	Incubation Time:		Result:	Increased AP2 and CD36 cells gene mRNA expression and enhanced glucose uptake when stimulated by insulin.
Cell Line:	3T3-L1 mouse preadipocyte cells								
Concentration:	10 $\mu$ M								
Incubation Time:									
Result:	Increased AP2 and CD36 cells gene mRNA expression and enhanced glucose uptake when stimulated by insulin.								
<b>In Vivo</b>	<p>BR102375 (Compound 18) has decent efficacy on mouse diabetes model<sup>[1]</sup>.</p> <p>BR102375 reveals significant suppressive effect on random blood glucose increase(75 mpk, p.o., bid), shows decent effect on insulin resistance on Oral glucose tolerance test (OGTT) and discloses similar findings in body weight gain almost identical to Pioglitazone<sup>[1]</sup>.</p> <p>MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p>								

### CUSTOMER VALIDATION

- Life Sci. 2020 Aug 15;255:117849.

See more customer validations on [www.MedChemExpress.com](http://www.MedChemExpress.com)

---

## REFERENCES

- [1]. Choung W, et al. Discovery of BR102375, a new class of non-TZD PPAR $\gamma$  full agonist for the treatment of type 2 diabetes. *Bioorg Med Chem Lett*. 2019 Jun 19. pii: S0960-894X(19)30407-X.
- [2]. Yan Zhu, et al. Protective Role of Long Noncoding RNA CRNDE in Myocardial Tissues From Injury Caused by Sepsis Through the microRNA-29a/SIRT1 Axis. *Life Sci*. 2020 May 27;117849.
- 

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

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: [tech@MedChemExpress.com](mailto:tech@MedChemExpress.com)

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA