



Xcess Biosciences Inc.

7144 N Harlem Ave #169
Chicago, IL 60631 USA

<http://www.xcessbio.com>

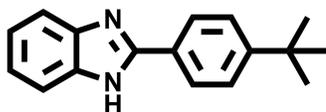
Toll free: 1-866-706-2330

Fax: 1-619- 810-0718

Email: info@xcessbio.com

PGC-1 α Transcriptional Activator – ZLN005

Chemical Name: 2-(4-(tert-butyl)phenyl)-1H-benzo[d]imidazole



Molecular Weight:	250.34
Formula:	C ₁₇ H ₁₈ N ₂
Purity:	≥98%
CAS#:	49671-76-3
Solubility:	DMSO up to 100 mM
Storage	Powder: 4 °C 1 year DMSO: 4 °C 3 months -20 °C 1 year

Biological Activity:

ZLN005 is a potent and selective small molecule PGC-1 α transcriptional activator. It stimulates the expression of PGC-1 α and downstream genes in skeletal muscle cells, improving glucose utilization and fatty acid oxidation. Chronic oral administration of ZLN005 at 15 mg/kg per day to diabetic db/db mice increased PGC-1 α and downstream gene transcription in skeletal muscle, increasing fat oxidation and improving glucose tolerance, pyruvate tolerance, and insulin sensitivity. PGC-1 α is a tissue-specific and inducible transcriptional coactivator for several nuclear receptors and plays a key role in energy metabolism, hepatic gluconeogenesis, and cholesterol homeostasis. ZLN005 is a useful chemical probe to study this target.

How to Use:

In vitro: ZLN005 was used at 10-20 μ M final concentration in various in vitro assays.

In vivo: ZLN005 was orally administered in db/db mice at 15 mg/kg once per day for 6 weeks.

Reference:

1. Zhang LN, et al. Novel small-molecule PGC-1 α transcriptional regulator with beneficial effects on diabetic db/db mice. (2013) Diabetes. 62(4):1297-307.

Products are for research use only. Not for human use.