

## Catalog # 10-3948 SLU-PP-332

CAS# 303760-60-3

(E)-4-Hydroxy-N'-(naphthalen-2-ylmethylene)benzohydrazide; 4-Hydroxybenzoic acid 2-(2-naphthalenylmethylene)hydrazide; SR9861 Lot # FBA8218

SLU-PP-332 is a pan-agonist of the estrogen receptor-related receptors (EC $_{50}$ 's cell-based cotransfection/reporter assay: ERR $\alpha$  = 98 nM, ERR $\beta$  = 230 nM, ERR $\gamma$  = 430 nM) with highest potency for ERR $\alpha$ . SLU-PP-332 increased mitochondrial function and cellular respiration in a skeletal muscle cell line. It also increased fast oxidative skeletal muscle fibers (Type IIa) and exercise endurance in mice in an ERR $\alpha$ -specific manner. SLU-PP-332 activates an acute aerobic exercise genetic response *via* inducing the expression of DDIT4.

- Lin et al. (2018), Design, synthesis, and evaluation of simple phenol amides as ERRγ agonists; Bioorg. Med. Chem. Lett., 28 1313
- 2) Billon et al. (2023), Synthetic ERRα/β/γ Agonist Induces an ERRα-Dependent Acute Aerobic Exercise Response and Enhances Exercise Capacity; ACS Chem. Biol., **18** 756

## **PHYSICAL DATA**

Molecular Weight: 290.32

Molecular Formula: C<sub>18</sub>H<sub>14</sub>N<sub>2</sub>O<sub>2</sub>

Purity: >98% by HPLC

NMR: (Conforms)

Solubility: DMSO (75 mg/ml)

Physical Description: White solid

Storage and Stability: Store as supplied at -20°C for up to 2 years from the date of purchase. Solutions in

DMSO may be stored at -20°C for up to 2 months.

Materials provided by Focus Biomolecules are for laboratory research use only and are not intended for human or veterinary applications.