

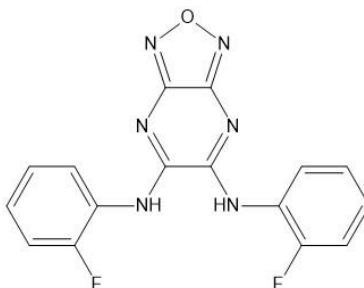
Catalog # 10-5104

BAM15

CAS# 210302-17-3

N⁵,N⁶-bis(2-Fluorophenyl)-[1,2,5]oxadiazolo[3,4-*b*]pyrazine-5,6-diamine

Lot # X109813



A mitochondrial protonophore uncoupler with fewer off-target effects ($EC_{50} = 270$ nM in L6 myoblast mitochondria.)^{1,2} Compared to FCCP, an uncoupler of equal potency, BAM15 stimulates a higher maximum rate of mitochondrial respiration and does not depolarize the plasma membrane.² Stimulates energy expenditure, protects against obesity and improves glycemic control in rodent models.³ Reverses diet-induced obesity and insulin resistance in mice.⁴ Attenuates transportation-induced apoptosis in iPS-differentiated retinal tissue.⁵

- 1) Kenwood *et al.* (2015), *Structure-activity relationships of furazano[3,4-*b*]pyrazines as mitochondrial uncouplers*; *Bioorg. Med. Chem. Lett.*, **25** 4858
- 2) Kenwood *et al.* (2013), *Identification of a Novel Mitochondrial Uncoupler That Does Not Depolarize the Plasma Membrane*; *Mol. Metab.*, **3** 114
- 3) Axelrod *et al.* (2020), *BAM15-mediated Mitochondrial Uncoupling Protects Against Obesity and Improves Glycemic Control*; *EMBO Mol. Med.*, **Jun 10**; e12088
- 4) Alexopoulos *et al.* (2020), *Mitochondrial Uncoupler BAM15 Reverses Diet-Induced Obesity and Insulin Resistance in Mice*; *Nat. Commun.*, **11** 2397
- 5) Tang *et al.* (2019), *BAM15 Attenuates Transportation-Induced Apoptosis in iPS-differentiated Retinal Tissue*; *Stem Cell Res. Ther.*, **10** 64

PHYSICAL DATA

Molecular Weight:	340.29
Molecular Formula:	C ₁₆ H ₁₀ F ₂ N ₆ O
Purity:	98% by TLC
	NMR: (Conforms)
Solubility:	DMSO (up to 35 mg/ml)
Physical Description:	Pale-yellow solid
Storage and Stability:	Store as supplied desiccated 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 1 month.

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