

## Catalog # 10-1456 Optovin

CAS# 348575-88-2 5-[[2,5-Dimethyl-1-(3-pyridinyl)-1H-pyrrol-3-yl]methylene]-2-thioxo-4-thiazolidinone Lot # X106456

Reversible, photoactive TRPA1 activator. Optovin stimulates human TRPA1 channels and enables repeated photoactivation of motor behaviors in wild-type zebrafish ( $EC_{50} = 2 \mu M$ ) and mice, *in vivo*. Photodetection is performed by sensory neurons expressing the TRPA1 cation channel which is activated via structure-dependent photochemical reactions with redox-sensitive cysteine residues.<sup>1</sup>

1) Kokel et al. (2013), Photochemical activation of TRPA1 channels in neurons and animals; Nat. Chem. Biol., **9** 257

## PHYSICAL DATA

Molecular Weight: 315.41

Molecular Formula:  $C_{15}H_{13}N_3OS_2$ Purity: 98% by TLC

NMR: (Conforms)

Solubility: DMSO (up to 30 mg/ml).

Physical Description: Tan solid

Storage and Stability: Store as supplied, desiccated at -20°C for up to 1 year 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.

Focus Biomolecules LLC 400 Davis Drive, Suite 600 Plymouth Meeting PA 19462 www.focusbiomolecules.com