

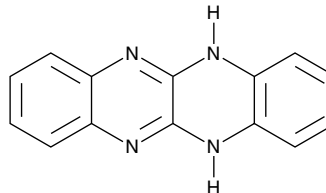
# Product Information



## ML-090

Item No. 15172

**CAS Registry No.:** 531-46-4  
**Formal Name:** 5,12-dihydro-quinoxalino[2,3-b]quinoxaline  
**Synonyms:** CCG-44699, CID-616479, Fluoflavin, NSC 179821  
**MF:** C<sub>14</sub>H<sub>10</sub>N<sub>4</sub>  
**FW:** 234.3  
**Purity:** ≥95%  
**Stability:** ≥2 years at -20°C  
**Supplied as:** A crystalline solid  
**UV/Vis.:** λ<sub>max</sub>: 248, 324, 341, 393, 415, 442 nm



### Laboratory Procedures

For long term storage, we suggest that ML-090 be stored as supplied at -20°C. It should be stable for at least two years. ML-090 is supplied as a crystalline solid. A stock solution may be made by dissolving the ML-090 in the solvent of choice. ML-090 is soluble in DMSO at a concentration of approximately 10 mg/ml.

NADPH oxidase 1 (NOX1) generates reactive oxygen species (ROS) in colon epithelial cells that interacts with both pathogenic and normal bacteria. Excess ROS production, however, is associated with damage to the intestinal mucosa, inflammatory bowel disease, and prostate cancer.<sup>1</sup> ML-090 is the first identified NOX1-specific inhibitor (IC<sub>50</sub> = 360 nM in HEK293 cells) based on a quinoxaline scaffold that demonstrates potent selectivity over NOX2, NOX3, and NOX4 (IC<sub>50</sub>s ≥ 10 μM) and xanthine oxidase (IC<sub>50</sub> = 3.5 μM).<sup>1</sup>

### Reference

1. Brown, S.J., Gianni, D., Bokoch, G., *et al.* Probe report for NOX1 inhibitors, in *Probe Reports from the NIH Molecular Libraries Program*, 1 (2009).

### Related Products

For a list of related products please visit: [www.caymanchem.com/catalog/15172](http://www.caymanchem.com/catalog/15172)

**WARNING: THIS PRODUCT IS FOR LABORATORY RESEARCH ONLY: NOT FOR ADMINISTRATION TO HUMANS. NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.**

#### SAFETY DATA

This material should be considered hazardous until information to the contrary becomes available. Do not ingest, swallow, or inhale. Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling. This information contains some, but not all, of the information required for the safe and proper use of this material. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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