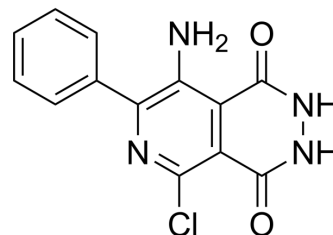


## L-012

|                    |                                                                                           |
|--------------------|-------------------------------------------------------------------------------------------|
| Cat. No.:          | HY-118315                                                                                 |
| CAS No.:           | 143323-55-1                                                                               |
| Molecular Formula: | C <sub>13</sub> H <sub>9</sub> ClN <sub>4</sub> O <sub>2</sub>                            |
| Molecular Weight:  | 288.69                                                                                    |
| Target:            | Reactive Oxygen Species                                                                   |
| Pathway:           | Immunology/Inflammation; Metabolic Enzyme/Protease; NF-κB                                 |
| Storage:           | Please store the product under the recommended conditions in the Certificate of Analysis. |



## BIOLOGICAL ACTIVITY

## Description

L-012 is a chemiluminescent probe that reacts with various types of ROS produced by activated neutrophils in human blood, oral cavity, and rat peritoneum and produces strong chemiluminescence (CHL). L-012 produces CHL primarily by reacting with hydroxyl radicals and hypochlorite. L-012 can be used to study ROS generation in complex biological systems and the role of ROS in the pathogenesis of various diseases<sup>[1]</sup>.

## CUSTOMER VALIDATION

- Mater Today Bio. 2024 Jul 22;28:101163.

See more customer validations on [www.MedChemExpress.com](http://www.MedChemExpress.com)

## REFERENCES

- [1]. Imada I, et al. Analysis of reactive oxygen species generated by neutrophils using a chemiluminescence probe L-012[J]. Analytical biochemistry, 1999, 271(1): 53-58.
- [2]. Zielonka J, et al. On the use of L-012, a luminol-based chemiluminescent probe, for detecting superoxide and identifying inhibitors of NADPH oxidase: a reevaluation. Free Radic Biol Med. 2013;65:1310-1314.
- [3]. Kielland A, et al. In vivo imaging of reactive oxygen and nitrogen species in inflammation using the luminescent probe L-012. Free Radic Biol Med. 2009;47(6):760-766.

**Caution: Product has not been fully validated for medical applications. For research use only.**

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: [tech@MedChemExpress.com](mailto:tech@MedChemExpress.com)

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA