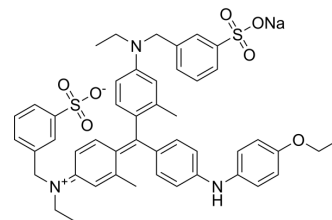


## Brilliant blue G-250

|                           |  |
|---------------------------|--|
| <b>Cat. No.:</b>          | HY-D0014   |
| <b>CAS No.:</b>           | 6104-58-1  |
| <b>Molecular Formula:</b> | C <sub>47</sub> H <sub>48</sub> N <sub>3</sub> NaO <sub>7</sub> S <sub>2</sub>   |
| <b>Molecular Weight:</b>  | 854.02   |
| <b>Target:</b>            | Biochemical Assay Reagents   |
| <b>Pathway:</b>           | Others   |
| <b>Storage:</b>           | 4°C, sealed storage, away from moisture<br>* In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture) |



### SOLVENT & SOLUBILITY

|   |   |                          |              |           |            |
|---|---|--------------------------|--------------|-----------|------------|
| <b>In Vitro</b>   | DMSO : 12.5 mg/mL (14.64 mM; ultrasonic and warming and heat to 60°C)   |                          |              |           |            |
|   | H <sub>2</sub> O : 10 mg/mL (11.71 mM; Need ultrasonic)   |                          |              |           |            |
|   |   | Solvent<br>Concentration | Mass<br>1 mg | 5 mg      | 10 mg      |
|   | <b>Preparing Stock Solutions</b>  | 1 mM                     | 1.1709 mL    | 5.8547 mL | 11.7093 mL |
|   |   | 5 mM                     | 0.2342 mL    | 1.1709 mL | 2.3419 mL  |
| 10 mM   |   | 0.1171 mL                | 0.5855 mL    | 1.1709 mL |            |
| Please refer to the solubility information to select the appropriate solvent. |   |                          |              |           |            |
| <b>In Vivo</b>  | 1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline<br>Solubility: ≥ 0.56 mg/mL (0.66 mM); Clear solution |                          |              |           |            |
|   | 2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)<br>Solubility: ≥ 0.56 mg/mL (0.66 mM); Clear solution            |                          |              |           |            |

### BIOLOGICAL ACTIVITY

|                    |  |
|--------------------|--|
| <b>Description</b> | Brilliant Blue G-250 is a dye commonly used for the visualization of proteins separated by SDS-PAGE, offering a simple staining procedure and high quantitation. In the Bradford protein assay, protein concentrations are determined by the absorbance at 595 nm due to the binding of Brilliant Blue G-250 to proteins. Brilliant Blue G-250 is a safe highly selective P2×7R antagonist with promising consequent inactivation of NLRP3 inflammasome <sup>[1][2][3]</sup> . |
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### CUSTOMER VALIDATION

- Adv Sci (Weinh). 2022 Oct 18;e2203088.

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## REFERENCES

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- [1]. Dyballa N, Metzger S. Fast and sensitive colloidal coomassie G-250 staining for proteins in polyacrylamide gels. J Vis Exp. 2009;(30):1431. Published 2009 Aug 3.
- [2]. Han XX, et al. Highly sensitive protein concentration assay over a wide range via surface-enhanced Raman scattering of Coomassie brilliant blue. Anal Chem. 2010;82(11):4325-4328.
- [3]. Zohny MH, et al. Coomassie brilliant blue G-250 dye attenuates bleomycin-induced lung fibrosis by regulating the NF- $\kappa$ B and NLRP3 crosstalk: A novel approach for filling an unmet medical need [published online ahead of print, 2022 Feb 21]. Biomed Pharmacother. 2022;148:112723.
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**Caution: Product has not been fully validated for medical applications. For research use only.**

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