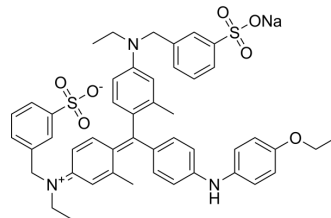


## Brilliant blue G-250

<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 * In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture)



### SOLVENT & SOLUBILITY

#### In Vitro

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)

Preparing Stock Solutions	Solvent Concentration	Mass	1 mg	5 mg	10 mg
	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.

#### In Vivo

- Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline  
Solubility: ≥ 0.56 mg/mL (0.66 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)  
Solubility: ≥ 0.56 mg/mL (0.66 mM); Clear solution

### BIOLOGICAL ACTIVITY

#### Description

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>.

### CUSTOMER VALIDATION

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

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- J Neuroinflammation. 2024 Mar 25;21(1):73.

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

## 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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