

# **Product** Data Sheet

## **Brilliant Blue R250**

**Cat. No.:** HY-D0232 **CAS No.:** 6104-59-2

Molecular Formula: C<sub>45</sub>H<sub>44</sub>N<sub>3</sub>NaO<sub>7</sub>S<sub>2</sub>

Molecular Weight: 825.97

Target: Fluorescent Dye

Pathway: Others

Storage: 4°C, sealed storage, away from moisture and light

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

and light)

#### **SOLVENT & SOLUBILITY**

In Vitro

DMSO: 50 mg/mL (60.53 mM; Need ultrasonic)

H<sub>2</sub>O: 2 mg/mL (2.42 mM; ultrasonic and warming and heat to 60°C)

Preparing Stock Solutions	Solvent Mass Concentration	1 mg	5 mg	10 mg
	1 mM	1.2107 mL	6.0535 mL	12.1070 mL
	5 mM	0.2421 mL	1.2107 mL	2.4214 mL
	10 mM	0.1211 mL	0.6053 mL	1.2107 mL

Please refer to the solubility information to select the appropriate solvent.

In Vivo

- 1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline Solubility: ≥ 1 mg/mL (1.21 mM); Clear solution
- 2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE- $\beta$ -CD in saline) Solubility:  $\ge$  1 mg/mL (1.21 mM); Clear solution

#### **BIOLOGICAL ACTIVITY**

**Description**Brilliant blue R250 (Brilliant Blue R), an anionic dye, is the most popular stain to detect proteins resolved in SDS-PAGE gels<sup>[1]</sup>

In Vitro Stain solution preparation:

Add 100 mL of glacial acetic acid to 450 mL ultrapure water. Dissolve the 3 g of Coomassie Dye in 450 mL methanol.

Filter the solution before use Standard Gel Staining Protocol

- 1. Gel may be prefixed in 50% MeOH, 10% HoAC, and 40% H2O for 30 minutes to overnight.
- $2. \, Stain\, gel\, in\, the\, above\, solution,\, with\, 0.25-0.3\%\, Coomassie\, Blue\, R-250, for\, 2-4\, hours,\, until \, the\, gel\, is\, a\, uniform\, blue\, color.$

Staining is complete when the gel is no longer visible in the dye solution. Berore complete staining, the gel will appear as a lighter area against the dark staining solution.

- 3. Destain for 4-24 hours in 5% MeOH, 7.5% HOAC, 87.5%  $H_2O$ .
- 4. Store gels in 7% HOAC.

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

### **CUSTOMER VALIDATION**

• Research Square Print. 2023 Feb 9.

See more customer validations on  $\underline{www.MedChemExpress.com}$ 

#### **REFERENCES**

[1]. Krause RGE, et al. Crystal violet stains proteins in SDS-PAGE gels and zymograms. Anal Biochem. 2019;566:107-115.

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

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