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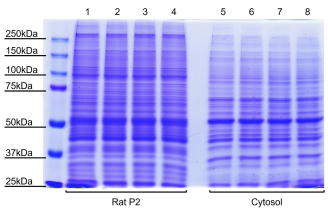
DATASHEET

Brilliant Blue R-250

Product overview

Name	Brilliant Blue R-250
Cat No	HB0739
Alternative names	Brilliant blue R; Coomassie brilliant blue R-250; Acid Blue 83; CI 42660
Biological description	Red tinted form of coomassie dye. Key tool for various colorimetric protein gel stains. Used to stain and quantify proteins.
Biological action	Dyes & stains
Purity	>90%
Description	Key tool for staining and quantifying proteins

Images



Biological Data

Application notes

#Protocol 1: Brilliant Blue R-250 staining of rat brain fractions.

- P2 membrane and cytosol fractions were prepared from rat brains following established protocols (Molnar et al., 1993. Neuroscience 53:307-326).
- SDS-PAGE was conducted following standard protocols (Laemmli., 1970. Nature 227:680-685) using a 10% acrylamide gel.
- Staining and de-staining solutions were prepared as:
  - Staining:

Reagent	Concentration	Amount for 250ml
Brilliant Blue R-250 (HB0739)	0.025%	62.5mg
Methanol	40%	100ml
Acetic acid	7%	17.5ml
dH_2O	53%	132.5ml

  - De-staining:

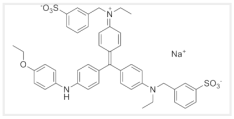
Reagent	Concentration	Amount for 250ml
Methanol	50%	125ml
Acetic acid	7%	17.5ml
dH_2O	43%	107.5ml

- The gel was incubated in staining solution for 20 minutes followed by incubation in destaining solution for 3 hours with multiple changes of solution.
- Imaging was conducted using a Epson 4180 Photo scanner

Solubility & Handling

Storage instructions	Room temperature
Solubility overview	Water (10mM)
Storage of solutions	Prepare and use solutions on the same day if possible. Store solutions at -20°C for up to one month if storage is required. Equilibrate to RT and ensure the solution is precipitate free before use.
Shipping Conditions	Stable for ambient temperature shipping. Follow storage instructions on receipt.
Important	This product is for RESEARCH USE ONLY and is not intended for therapeutic or diagnostic use. Not for human or veterinary use.

Chemical Data

Chemical name	Brilliant blue R; Coomassie brilliant blue R-250; Acid Blue 83; CI 42660
Molecular Weight	825.99
Chemical structure	
Molecular Formula	$C_{45}H_{44}N_3O_7S_2Na$
CAS Number	6104-59-2
PubChem identifier	61365
SMILES	CCN(CC1=CC(=CC=C1)S(=O)(=O)[O-])C2=CC=C(C=C2)C(=C3C=CC(=[N+](CC)CC4=CC(=CC=C4)S(=O)(=O)[O-])C=C3)C5=CC=C(C=C5)NC6=CC=C(C=C6)OCC.[Na+]

References

Colorimetric protein assay techniques.

Sapan CV *et al* (1999) Biotechnol Appl Biochem 29 (Pt 2)
PubMedID 10075906

Spectrophotometric and colorimetric determination of protein concentration.

Simonian MH *et al* (2006) Curr Protoc Mol Biol Chapter 10
PubMedID 18265371