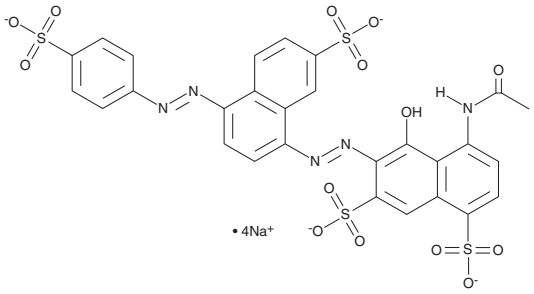
PRODUCT INFORMATION

Brilliant Black BN

Item No. 34462

CAS Registry No.: 2519-30-4
Formal Name: 4-(acetylamino)-5-hydroxy-6-[2-[7-sulfo-4-[2-(4-sulfophenyl)diazenyl]-1-naphthalenyl]diazenyl]-1,7-naphthalenedisulfonic acid, tetrasodium salt
Synonyms: CI 28440, E151
MF: $C_{28}H_{17}N_5O_{14}S_4 \bullet 4Na$
FW: 867.7
Purity: ≥60%
Supplied as: A solid
Storage: -20°C
Stability: ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

Brilliant black BN is supplied as a solid. A stock solution may be made by dissolving the brilliant black BN in the solvent of choice, which should be purged with an inert gas. Brilliant black BN is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of brilliant black BN in these solvents is approximately 5 and 1 mg/ml, respectively.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of brilliant black BN can be prepared by directly dissolving the solid in aqueous buffers. The solubility of brilliant black BN in PBS (pH 7.2) is approximately 10 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

Brilliant black BN is a sulfonated azo dye with antiviral activity.[1,2] It reduces the infectivity of enterovirus 71 (EV71) in rhabdomyosarcoma cells (IC_{50} = 10.1 µM) *via* inhibition of viral entry.[2] Formulations containing brilliant black BN have commonly been used as food color additives.

References

1. Macioszek, V.K. and Kononowicz, A.K. The evaluation of the genotoxicity of two commonly used food colors: Quinoline yellow (E 104) and brilliant black BN (E 151). *Cell. Mol. Biol. Lett.* **9(1)**, 107-122 (2004).
2. Meng, T., Jia, Q., Wong, S.-M., *et al. In vitro* and *in vivo* inhibition of the infectivity of human enterovirus 71 by a sulfonated food azo dye, brilliant black BN. *J. Virol.* **93(17)**, e00061-19 (2019).

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