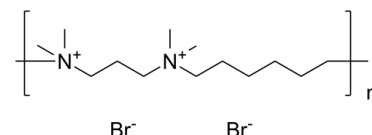


Data Sheet

Product Name:	Hexadimethrine bromide
Cat. No.:	CS-0063146
CAS No.:	28728-55-4
Molecular Formula:	C ₁₅ H ₃₆ Br ₂ N ₂
Molecular Weight:	404.27
Target:	Others
Pathway:	Others
Solubility:	DMSO : 5 mg/mL (12.37 mM; Need ultrasonic and warming); H ₂ O : ≥ 125 mg/mL (309.20 mM)



BIOLOGICAL ACTIVITY:

Hexadimethrine bromide is a cationic polymer discovered to enhance retroviral transduction. **In Vitro:** Hexadimethrine bromide inhibits human mesenchymal stem cell proliferation during lentiviral transduction. Hexadimethrine bromide is considered non-toxic at low concentrations, but has been found to negatively affect cell proliferation in some cell types at concentrations greater than 10 µg/mL. Trypsinized cells exposed to Hexadimethrine bromide are visibly larger in size when viewed under the microscope^[1].

PROTOCOL (Extracted from published papers and Only for reference)

Cell Assay: ^[1]Trypsinized cells are washed and resuspended in medium at 2×10⁴ cells/mL with or without rhFGF-2 (final concentration=10 ng/mL, PeproTech) and with or without Hexadimethrine bromide at a final **Hexadimethrine bromide** concentration of **1, 4, or 8 µg/mL**. The different conditions are seeded in 96-well plates at 1×10³ cells in 50 µL per well in triplicate and cultured at 37°C, 5% CO₂. After 6, 9, or 24 hr, the medium is changed and subsequent medium changes occurred every 3-4 days with 50 µL of ± FGF-2 medium (10 ng/mL). Plates are harvested on day 4, 7, 14, and 21 by removing the medium and placing the plates in the -80°C freezer until the day of analysis. The CyQUANT assay is then performed on the wells^[1].

References:

[1]. Lin P, et al. Polybrene inhibits human mesenchymal stem cell proliferation during lentiviral transduction. PLoS One. 2011;6(8):e23891.

CAIndexNames:

Poly[(dimethyliminio)-1,3-propanediyldimethyliminio]-1,6-hexanediyld bromide (1:2)]

SMILES:

C[N+](CCCCC)(C)CCC[N+](C)(C)C.[Br-].[Br-].[n]

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

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