85580/85578 Spermidine trihydrochloride

**CAS Number:** 334-50-9

**Product Description:**
Molecular Formula: $\text{C}_7\text{H}_{19}\text{N}_3 \cdot 3\text{HCl}$
Molecular Weight: 254.6 g/mol
mp: 257-259 °C
Is soluble in water (100 mg/ml), yielding a clear, colorless solution.
Spermidine trihydrochloride is hygroscopic.
Store at room temperature

Spermidine is biogenic polyamine formed from putrescine, a precursor of spermine. It was first detected in human sperm, but occurs widely in nature. It is essential in both normal and neoplastic tissue growth.1

Spermidine has a role in cell growth processes2,3 and the formation and interconversion of spermidine in mammalian cells has been reported.4
It has been studied in the regulation of tRNA methyltransferase activity5 and stimulates T4 polynucleotide kinase activity.6

**Applications:**
Spermidine trihydrochloride has been used as a buffer component for chromosome isolation in bivariate flow cytogenetic analysis and sorting.8
Used for the purification of human Rad51 protein by selective spermidine precipitation11 and can be used in extraction as a buffer component.10
Inhibits the nitric oxide synthase.9

**References:**
1. The Merck Index, 11th ed., Entry# 8698.
Precautions and Disclaimer:
This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

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