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DATASHEET

Spermidine hydrochloride

Product overview

Name	Spermidine hydrochloride
Cat No	HB0586
Biological action	Activator
Description	nNOS inhibitor / $PTPN_2$ activator

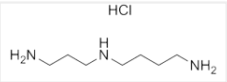
Biological Data

Biological description	Neuronal nitric oxide synthase (nNOS) inhibitor and protein tyrosine phosphatase non-receptor type 2 ($PTPN_2$) activator. Also binds the NMDA polyamine modulatory site. Enhances PCR amplification of DNA and improves efficacy of DNA cleavage. Potential anti-inflammatory properties.

Solubility & Handling

Storage instructions	+4°C (desiccate)
Solubility overview	Soluble in water (100mM)
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	*N*-(3-Aminopropyl)-1,4-butanediamine trihydrochloride
Molecular Weight	254.63
Chemical structure	
Molecular Formula	$C_7H_{19}N_3.3HCl$
CAS Number	334-50-9
PubChem identifier	9539
SMILES	NCCCNCCCCN.Cl.Cl.Cl
InChiKey	LCNBIHVSOPXFMR-UHFFFAOYSA-N

References

Polyamines inhibit nitric oxide synthase in rat cerebellum.

Hu J *et al* (1994) Neurosci Lett 175(1-2)
PubMedID 7526294

Spermidine facilitates PCR amplification of target DNA.

Wan CY *et al* (1993) PCR Methods Appl 3(3)
PubMedID 8118404

Activation of protein tyrosine phosphatase non-receptor type 2 by spermidine exerts anti-inflammatory effects in human

THP-1 monocytes and in a mouse model of acute colitis.

Morón B *et al* (2013) PLoS One 8(9)
PubMedID 24040033

Effects of polyamines on the binding of [3H]MK-801 to the N-methyl-D-aspartate receptor: pharmacological evidence for the existence of a polyamine recognition site.

Williams K *et al* (1989) Mol Pharmacol 36(4)
PubMedID 2554112