Datasheet

Product overview

Name: Sodium butyrate
Cat No: HB1399

Short description: HDAC inhibitor. Directs mESC differentiation into hepatocytes.

Biological description: Histone deacetylase (HDAC) inhibitor (IC_{50} values are 0.3, 0.3 and 0.4 mM for HDAC1, 7 and 2 respectively). Does not inhibit HDAC6 and HDAC10. Upregulates expression of pluripotency genes in iPSCs and directs mESC differentiation into hepatocytes. Improves cognition and shows anti-Alzheimer's disease and antidepressant actions.

Alternative names: NaB; SB

Biological action: Inhibitor

Properties

Chemical name: Butanoic acid sodium salt
Molecular Weight: 110.09

Chemical structure:

![Chemical Structure](image)

Molecular Formula: C_{4}H_{7}NaO_{2}
CAS Number: 156-54-7

Storing and Using Your Product

Storage instructions: room temperature
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.

References for Sodium butyrate

Histone deacetylase is a target of valproic acid-mediated cellular differentiation.


PubMedID: 14871841
Sodium butyrate functions as an antidepressant and improves cognition with enhanced neurotrophic expression in models of maternal deprivation and chronic mild stress.
PubMedID: 25233278

Sodium butyrate efficiently converts fully reprogrammed induced pluripotent stem cells from mouse partially reprogrammed cells.
PubMedID: 25093667

Sodium butyrate improves memory function in an Alzheimer’s disease mouse model when administered at an advanced stage of disease progression.
PubMedID: 21593570