Phone: 888-558-5227

651-644-8424

888-558-7329 Fax: Email: getinfo@lktlabs.com

Web: lktlabs.com

Product Information

Product ID B8276 CAS No. 156-54-7

Chemical Name

Synonym Sodium butyrate, Sodium butanoate

Formula C₄H₇NaO2 Formula Wt. 110.09 Melting Point 250-253°C Purity ≥97%

Solubility Soluble in water.

Bulk quanitites available upon request

Product ID Size B8276 5 g B8276 25 g

Store Temp Ambient Ship Temp Ambient

Description Sodium butyrate is an inhibitor of histone deacetylases (HDACs) that exhibits antidepressant, immunomodulatory, and anticancer activities. In animals undergoing the light dark test, tail suspension test, and forced swim test, sodium butyrate decreases restraint stress-induced depression. In prostate cancer cells, this compound inhibits cell growth, induces apoptosis, downregulates expression of Bcl-xl and Bcl-2, and upregulates expression of Bak and Bax. Additionally, sodium butyrate decreases release of IL-12 and increases production of IL-23 in dendritic cells. Sodium butyrate also alters RNA splicing.

References Han A, Sung YB, Chung SY, et al. Possible additional antidepressant-like mechanism of sodium butyrate: targeting the hippocampus. Neuropharmacology. 2014 Jun;81:292-302. PMID: 24607816.

> Mu D, Gao Z, Guo H, et al. Sodium butyrate induces growth inhibition and apoptosis in human prostate cancer DU145 cells by up-regulation of the expression of annexin A1. PLoS One. 2013 Sep 23;8(9):e74922. PMID: 24086397.

> Berndt BE, Zhang M, Owyang SY, et al. Butyrate increases IL-23 production by stimulated dendritic cells. Am J Physiol Gastrointest Liver Physiol. 2012 Dec 15;303(12):G1384-92. PMID: 23086919.

> Hnilicová J, Hozeifi S, Dušková E, et al. Histone deacetylase activity modulates alternative splicing. PLoS One. 2011 Feb 2;6(2):e16727. PMID: 21311748.

Caution: This product is intended for laboratory and research use only. It is not for human or drug use.