
Product Data Sheet

Product Name: BPNT1 Human
 Cat. No.: GP21449
 Batch No.: 1

Product Data

Purity	>98%	Source	Escherichia Coli.
Physical Appearance	solid	Shipping Condition	Shipped with Ice Packs.
Synonyms	3'(2'); 5'-bisphosphate nucleotidase 1; Bisphosphate 3'-nucleotidase 1; PAP-inositol-1;4-phosphatase; PIP; EC 3.1.3.7; BPntase.		
Amino Acid Sequence	MRGSHHHHHH GMASMTGGQQ MGRDLYDDDD KDRWGSMAS NTVLMRLVAS AYSIAQKAGM IVRRVIAEGD LGIVEKTCAT DLQTKADRLA QMSICSSLAR KFPKLTIIGE EDLPSEEVDQ ELIEDSQWEE ILKQPCPSQY SAIKEEDLVV WVDPLDGTKE YTEGLLDNVT VLI GIAYEGK AIAGVINQPY YNYEAGPDAV LGRTIWGVLG LGAFGFQLKE VPAGKHIITT TRSHSNKLV DCVAAMNPDA VLRVGGAGNK IIQLIEGKAS AYVFASPGCK KWDTCAPEVI LHAVGGKLTLD IHGNVLQYHK DVKHMNSAGV LATLRNYDYY ASRVPESIKN ALVP		
Formulation	The BPNT1 protein solution (0.5mg/1ml) is formulated in 20mM Tris-HCl buffer (pH8.0) 5mM DTT, 0.1M NaCl and 10% glycerol.		

Introduction

BPNT1 belongs to the magnesium-dependent, lithium-sensitive phosphomono-esterase superfamily. BPNT1 catalyzes the conversion of PAPS (adenosine 3'-phosphate 5' phosphosulfate) to APS (adenosine 5'-phosphosulfate) and the conversion of PAP (3'(2')-phosphoadenosine 5' phosphate) to AMP (adenosine 5'-phosphate) using magnesium as a cofactor. BPNT1 is expressed everywhere but at maximum levels in brain and kidney. BPNT1 is potently inhibited by lithium, a drug used for the treatment of manic depression and bipolar affective disorder, which suggests that BPNT1 has a possible role in the etiology of mood disorders.

Stability

Store at 4°C if entire vial will be used within 2-4 weeks. Store, frozen at -20°C for longer

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

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com

Address: 10292 Central Ave. #205, Montclair, CA, USA

Product Data Sheet

periods of time. Please avoid freeze thaw cycles.

Background

BPNT1 produced in E.Coli is a single, non-glycosylated polypeptide chain containing 344 amino acids (1-308a.a.) and having a molecular mass of 37.5kDa. BPNT1 is fused to a 36 amino acid His-tag at N-terminus & purified by proprietary chromatographic techniques.

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

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com

Address: 10292 Central Ave. #205, Montclair, CA, USA