PRODUCT INFORMATION

Expression system E.coli

Domain 38-291aa

UniProt No. Q86WA6

NCBI Accession No. NP_004323

Alternative Names Valacyclovir hydrolase, BPH-RP, MCNAA, VACVASE

PRODUCT SPECIFICATION

Molecular Weight 31.1 kDa (275aa) confirmed by MALDI-TOF

Concentration 0.5mg/ml (determined by Bradford assay)

Formulation Liquid in. 20mM Tris-HCl buffer (pH 8.0) containing 10% glycerol, 1mM DTT, 50mM NaCl

Purity > 95% by SDS-PAGE

Tag His-Tag

Application SDS-PAGE

Storage Condition

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

BACKGROUND

Description

BPHL is a Serine hydrolase which Belongs to the AB hydrolase superfamily. This family catalyzes the hydrolytic activation of amino acid ester prodrugs of nucleoside analogs such as valacyclovir and valganciclovir. This protein is expressed at high levels in liver and kidney and at lower levels in heart, intestine and skeletal muscle. It plays a role in detoxification processes. BPHL is a specific alpha-amino acid ester hydrolase that prefers small, hydrophobic, and aromatic side chains and does not have a stringent requirement for the leaving group other than preferring a primary alcohol. Recombinant human BPHL protein, fused to His-tag at N-terminus, was



expressed in E. coli and purified by using conventional chromatography techniques.

Amino acid Sequence

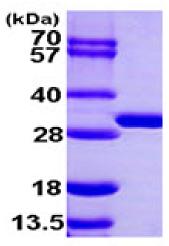
MGSSHHHHHH SSGLVPRGSH MSVTSAKVAV NGVQLHYQQT GEGDHAVLLL PGMLGSGETD FGPQLKNLNK KLFTVVAWDP RGYGHSRPPD RDFPADFFER DAKDAVDLMK ALKFKKVSLL GWSDGGITAL IAAAKYPSYI HKMVIWGANA YVTDEDSMIY EGIRDVSKWS ERTRKPLEAL YGYDYFARTC EKWVDGIRQF KHLPDGNICR HLLPRVQCPA LIVHGEKDPL VPRFHADFIH KHVKGSRLHL MPEGKHNLHL RFADEFNKLA EDFLQ

General References

Lai L., et al. (2008) J. Biol. Chem. 283:9318-9327. Puente X.S., et al. (1995) J. Biol. Chem. 270:12926-12932

DATA

SDS-PAGE



3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain.

15% SDS-PAGE (3ug)