

## BPHL Protein, Human (P.pastoris, His-Myc)

<b>Cat. No.:</b>	HY-P71838
<b>Synonyms:</b>	Biphenyl hydrolase like; Biphenyl hydrolase related; Biphenyl hydrolase-like protein; Biphenyl hydrolase-related protein; Bph-rp; Bphl; Bphrp; VACVase; Valacyclovir hydrolase; Valacyclovirase
<b>Species:</b>	Human
<b>Source:</b>	P. pastoris
<b>Accession:</b>	Q86WA6 (38S-291Q)
<b>Gene ID:</b>	670
<b>Molecular Weight:</b>	Approximately 32.3 kDa

### PROPERTIES

<b>AA Sequence</b>	<pre> SVTSAKVAVN   GVQLHYQQTG   EGDHAVLLLP   GMLGSGETDF GPQLKKNLNKK  LFTVVAWDPR  GYGHSRPPDR  DFPADFFERD AKDAVDLMKA   LKFKKVSLLG  WSDGGITALI  AAAKYPSYIH KMVIWGANAY   VTDEDSMIYE  GIRDVSKWSE  RTRKPLEALY GYDYFARTCE   KWVDGIRQFK  HLPDGNICRH  LLPRVQCPAL IVHGEKDPLV   PRFHADFIHK  HVKGSRLHLM  PEGKHNLHLR FADEFNKLAE   DFLQ           </pre>
<b>Biological Activity</b>	The enzyme activity of this recombinant protein is testing in progress, we cannot offer a guarantee yet.
<b>Appearance</b>	Lyophilized powder.
<b>Formulation</b>	Lyophilized after extensive dialysis against solution in Tris-based buffer, 50% glycerol.
<b>Endotoxin Level</b>	<1 EU/μg, determined by LAL method.
<b>Reconstitution</b>	It is not recommended to reconstitute to a concentration less than 100 μg/mL in ddH <sub>2</sub> O.
<b>Storage &amp; Stability</b>	Stored at -20°C for 2 years. After reconstitution, it is stable at 4°C for 1 week or -20°C for longer (with carrier protein). It is recommended to freeze aliquots at -20°C or -80°C for extended storage.
<b>Shipping</b>	Room temperature in continental US; may vary elsewhere.

### DESCRIPTION

<b>Background</b>	BPHL protein, a serine hydrolase, serves as a catalyst for the hydrolytic activation of amino acid ester prodrugs, exemplified by nucleoside analogs like valacyclovir and valganciclovir. Notably, it facilitates the conversion of valacyclovir to acyclovir through hydrolysis. Beyond its role in drug activation, BPHL is implicated in potential detoxification processes. As a specific alpha-amino acid ester hydrolase, it displays a preference for small, hydrophobic, and aromatic side chains, without
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imposing strict requirements on the leaving group, except for a preference toward a primary alcohol. Existing as a monomer, BPHL may also engage in the formation of homodimers.

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

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