



**LD Biopharma, Inc.**  
9924 Mesa Rim Road, Suite B  
San Diego, CA 92121  
Tel: 858-876-8266  
<http://www.ldbiopharma.com>

## - PRODUCT DATA SHEET -

**Name of Product:** Recombinant Human PPBP Protein  
**Catalog Number:** hRP-1084  
**Manufacturer:** LD Biopharma, Inc.

### Introduction

The protein encoded by human platelet basic protein (PPBP) gene is a platelet-derived growth factor that belongs to the CXC chemokine family. This growth factor is a potent chemoattractant and activator of neutrophils. It has been shown to stimulate various cellular processes including DNA synthesis, mitosis, glycolysis, intracellular camp accumulation, prostaglandin E2 secretion, and synthesis of hyaluronic acid and sulfated glycosaminoglycan. It also stimulates the formation and secretion of plasminogen activator by synovial cells.

Full-length mature form of human PPBP cDNA (35-128aa, derived from BC028217) was constructed with codon optimization and expressed with a small T7-His-TEV cleavage site Tag (29aa) fusion at its N-terminal. This protein was expressed in E.coli as inclusion bodies. The final product was refolded using our unique “temperature shift inclusion body refolding” technology and chromatographically purified.

|                          |  |                   |
|--------------------------|--|-------------------|
| <b>Gene Symbol:</b>      | PPBP   | (B-TG1; CTAP-III) |
| <b>Accession Number:</b> | NP_002695  |                   |
| <b>Species:</b>          | Human  |                   |
| <b>Size:</b>             | 50 µg / Vial   |                   |
| <b>Composition:</b>      | 0.5 mg/ml, sterile-filtered, in 20 mM pH 8.0 Tris-HCl Buffer, with proprietary formulation of NaCl, KCl, EDTA, arginine, DTT and Glycerol. |                   |
| <b>Storage:</b>          | In Liquid. Keep at -80°C for long term storage. Product is stable at 4 °C for at least 30 days.  |                   |

### Key References

Poon, T.C., et al., *Proteomic analysis reveals platelet factor 4 and beta-thromboglobulin as prognostic markers in severe acute respiratory syndrome.*



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Electrophoresis 33 (12), 1894-1900 (2012)

Xia,J., et al., *Expressions of CXCR7/ligands may be involved in oral carcinogenesis*. J. Mol. Histol. 42 (2), 175-180 (2011)

Krijgsveld,J., et al., *Thrombocidins, microbicidal proteins from human blood platelets, are C-terminal deletion products of CXC chemokines*. J. Biol. Chem. 275 (27), 20374-20381 (2000)

## **Applications**

1. May be used for in vitro mediated cell chemo-attractant regulation study with this protein as either coating matrix protein or soluble factor.
2. May be used for PPBP protein-protein interaction mapping.
3. Potential biomarker for evaluation acute respiratory syndrome when combined with b-thromboglobulin.
4. As antigen for specific antibody production.

## **Quality Control**

1. Purity: > 90% by SDS-PAGE.

## **Recombinant Protein Sequence**

MASMTGGQQMGRGHHHHHGNLYFQGGEFSSTKGQTKRNLAKGKEESLSDLYAELRCMCIKTT  
SGIHPKNIQSLEVIGKGTHCNQVEVIATLKDGRKICLDPDAPRIKKIVQKLAGDESAD