



Protein Tyrosine Phosphatase PTPN9/MEG2

Product Data Sheet

For Research Use Only, Not for use in diagnostic procedures

## Protein Tyrosine Phosphatase PTPN9/MEG2

Human, recombinant protein expressed in *E. coli.*, Active

Cat# CY-E1366

Amount: 50 $\mu$ g (1.2 $\mu$ g/ $\mu$ l)

Lot:

### Introduction:

Expression of dominant-negative mutant forms of PTPN9/MEG2 suppresses growth and expansion of colony-forming cells in vitro, indicating that PTPN9/MEG2 has an important role in the development of erythroid cells. PTPN9/MEG2 binds phosphatidylinositol-3,4,5-trisphosphate in vitro, through its N-terminal Sec14p homology domains, and colocalizes with this lipid on secretory vesicle membranes in intact cells. N-ethylmaleimide-sensitive factor, a key regulator of vesicle fusion, is also identified PTPN9/MEG2 substrate. PTPN9/MEG2 regulates secretory vesicle fusion.

### Product Description:

Phosphatase domain of human PTPN9/MEG2, containing an N-terminal GST tag, expressed in *E. coli.* and purified by GSH agarose chromatography.

### Gene Information:

The gene accession number is NM\_002833.

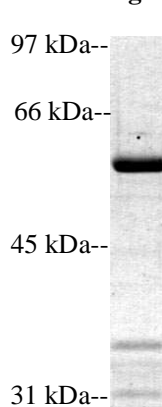
### Gene Aliases:

Protein tyrosine phosphatase non-receptor type 9, PTPN9, MEG2

### Formulation:

Recombinant PTPN9/MEG2 is supplied frozen in a buffer containing 100mM NaCl, 20mM Tris-HCl (pH 7.0), 1mM DTT, 1mM EDTA and 50% glycerol. Use a same buffer for dilution when needed.

### Molecular Weight:



Coomassie blue stain

Recombinant PTPN9/MEG2 demonstrates approximately 60 kDa band by SDS-PAGE analysis.

### Specific Activity:

320 units/ $\mu$ g. This unit value is determined at the point of production and may vary with time and various conditions. Specific Activity also varies among production lots.



## Protein Tyrosine Phosphatase PTPN9/MEG2

### Product Data Sheet

**For Research Use Only, Not for use in diagnostic procedures**

#### Unit Definitions:

One unit is defined as the amount of phosphatase required to release 1 pmol of phosphate from 3-O-Methylfluorescein Phosphate (OMFP) per minute at 30°C.

#### Storage:

Store product at -70°C. For optimal storage, aliquot target into smaller quantities after centrifugation and store at recommended temperature. For most favorable performance, AVOID REPEATED HANDLING AND MULTIPLE FREEZE/THAW CYCLES.

#### Stability:

Unopened vial at -70 °C, for 1 year after delivery.

#### References:

1. Xu MJ, Sui X, Zhao R, Dai C, Krantz SB, Zhao ZJ. PTP-MEG2 is activated in polycythemia vera erythroid progenitor cells and is required for growth and expansion of erythroid cells. *Blood*. 2003 Dec 15;102(13):4354-60.
2. Huynh H, Bottini N, Williams S, Cherepanov V, Musumeci L, Saito K, Bruckner S, Vachon E, Wang X, Kruger J, Chow CW, Pellicchia M, Monosov E, Greer PA, Trimble W, Downey GP, Mustelin T. Control of vesicle fusion by a tyrosine phosphatase. *Nat Cell Biol*. 2004 Sep;6(9):831-9.

#### PRODUCED BY

CycLex Co., Ltd.  
1063-103 Terasawaoka  
Ina, Nagano 396-0002  
Japan  
Fax: +81-265-76-7618  
e-mail: [info@cyclex.co.jp](mailto:info@cyclex.co.jp)  
URL: <http://www.cyclex.co.jp>

CycLex/CircuLex products are supplied for research use only. CycLex/CircuLex products and components thereof may not be resold, modified for resale, or used to manufacture commercial products without prior written approval from CycLex Co., Ltd. To inquire about licensing for such commercial use, please contact us via email.