



Protein Tyrosine Phosphatase PTPN13/FAP-1

Product Data Sheet

For Research Use Only, Not for use in diagnostic procedures

## Protein Tyrosine Phosphatase PTPN13/FAP-1 Human, recombinant protein expressed in *E. coli.*, Active

Cat# CY-E1369

Amount: 50 $\mu$ g (1.9 $\mu$ g/ $\mu$ l)

Lot:

### Introduction:

PTPN13/FAP-1 is the largest and the only PTP containing PDZ domains. PTPN13/FAP-1 binds to a negative regulatory domain in Fas that inhibits Fas expression on the cell surface and Fas-induced apoptosis. Overexpression of PTPN13/FAP-1 in a breast cancer cell line induced the dephosphorylation of the insulin receptor substrate protein-1 (IRS1), resulting in inhibition of PI 3-kinase (PI3K)-regulated cell growth and survival responses. PTPN13/FAP-1 may play a role in regulating PI3K-dependent signaling pathways that regulate cell growth and survival responses.

### Product Description:

Phosphatase domain of human PTPN13/FAP-1, containing an N-terminal GST tag, expressed in *E. coli.* and purified by GSH agarose chromatography.

### Gene Information:

The gene accession number is NM\_080685.

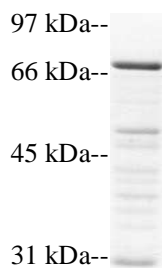
### Gene Aliases:

Protein tyrosine phosphatase non-receptor type 13, PTPN13, FAP-1

### Formulation:

Recombinant PTPN13/FAP-1 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 PTPN13/FAP-1 demonstrates approximately 68 kDa band by SDS-PAGE analysis.



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**Specific Activity:**

412 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.

**Unit Definitions:**

One unit is defined as the amount of phosphatase required to release 1 pmol of phosphate from CycLex's PTP substrate-1 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. Ivanov VN, Lopez Bergami P, Maulit G, Sato TA, Sassoon D, Ronai Z. FAP-1 association with Fas (Apo-1) inhibits Fas expression on the cell surface. Mol Cell Biol. 2003 May;23(10):3623-35.
2. Bompard G, Puech C, Prebois C, Vignon F, Freiss G. Protein-tyrosine phosphatase PTPL1/FAP-1 triggers apoptosis in human breast cancer cells. J Biol Chem. 2002 Dec 6;277(49):47861-9.

**PRODUCED BY**

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