# Recombinant Mouse Tyrosine-protein phosphatase non-receptor type 1 (Ptpn1)

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| **Product Code** | CSB-EP019024MO-B |
| **Storage** | Store at -20°C, for extended storage, conserve at -20°C or -80°C. |
| **Uniprot No.** | P35821 |
| **Product Type** | Recombinant Protein |
| **Immunogen Species** | Mus musculus (Mouse) |
| **Purity** | >85% (SDS-PAGE) |
| **Sequence** | MEMEKEFEEI DKAGNWAAIY QDIRHEASDF PCKVAKLPKN KNRNRYRDVS PFDHSRIKLH QEDNDYINAS LIKMEEAQRS YILTQGPLPN TCGHFWEMVW EQKSRGVVML NRIMEKGSLK CAQYWPQQEE KEMVFDDTGL KLTLISEDVK SYYTVRQLEL ENLTTKETRE ILHFHYTTWP DFGVPESPAS FLNFLFKVRE SGSLSLEHGP IVVHCSAGIG RSGTFCLADT CLLLMDKRKD PSSVDIKKVL LEMRRFRMGL IQTADQLRFS YLAVIEGAKF IMGDSSVQDQ WKELSREDLD LPPEHVPPPP RPPKRTLEPH NGKCKELFSS HQWVSEETCG DEDSLAREEG RAQSSAMHSV SSMSPDTEVR RRMVGGGLQS AQASVPTEEE LSSTEEEHKA HWPSHWKPFL VNVCMATLLA TGAYLCYRVC FH |
| **Source** | E.coli |
| **Target Names** | Ptpn1 |
| **Protein Names** | Recommended name: Tyrosine-protein phosphatase non-receptor type 1 EC= 3.1.3.48 Alternative name(s): Protein-tyrosine phosphatase 1B Short name= PTP-1B Protein-tyrosine phosphatase HA2 Short name= PTP-HA2 |
| **Expression Region** | 1-432 |
| **Notes** | Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week. |
| **Tag Info** | Tag type will be determined during the manufacturing process. |
| **Protein Length** | Full length protein |
| **Target Details** | This protein is the founding member of the protein tyrosine phosphatase (PTP) family, which was isolated and identified based on its enzymatic activity and amino acid sequence. PTPs catalyze the hydrolysis of the phosphate monoesters specifically on tyrosine residues. Members of the PTP family share a highly conserved catalytic motif, which is essential for the catalytic activity. PTPs are known to be signaling molecules that regulate a variety of cellular processes including cell growth, differentiation, mitotic cycle, and oncogenic transformation. This PTP has been shown to act as a negative regulator of insulin signaling by dephosphorylating the phosphotryosine residues of insulin receptor kinase. This PTP was also reported to dephosphorylate epidermal growth factor receptor kinase, as well as JAK2 and TYK2 kinases, which implicated the role of this PTP in cell growth control, and cell response to |

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| | interferon stimulation. |
| **Reconstitution** | We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Please reconstitute protein in deionized sterile water to a concentration of 0.1-1.0 mg/mL.We recommend to add 5-50% of glycerol (final concentration) and aliquot for long-term storage at -20°C/-80°C. Our default final concentration of glycerol is 50%. Customers could use it as reference. |
| **Shelf Life** | The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself.<br>Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C. |