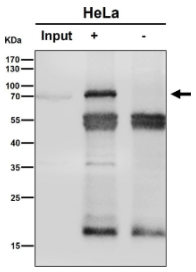
# PREPL Antibody / Prolyl endopeptidase-like protein [clone 30P78] (FY12160)

| Catalog No. | Formulation | Size |
|---|---|---|
| FY12160 | Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA | 100 ul |

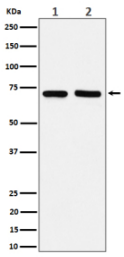
Recombinant RABBIT MONOCLONAL

**Bulk quote request**

| | |
|---|---|
| **Availability** | 2-3 weeks |
| **Species Reactivity** | Human, Mouse, Rat |
| **Format** | Liquid |
| **Clonality** | Recombinant Rabbit Monoclonal |
| **Isotype** | Rabbit IgG |
| **Clone Name** | 30P78 |
| **Purity** | Affinity-chromatography |
| **Buffer** | Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA. |
| **UniProt** | Q4J6C6 |
| **Applications** | Western Blot : 1:500-1:2000<br>Immunocytochemistry/Immunofluorescence : 1:50-1:200<br>Immunoprecipitation : 1:50<br>Flow Cytometry : 1:50 |
| **Limitations** | This PREPL antibody is available for research use only. |




Immunoprecipitation analysis using the antibody at 1:50 dilution. (Western blot at 1:1K dilution)




Western blot analysis of PREPL expression in (1) MCF7 cell lysate; (2) Raw264.7 cell lysate.

## Description

PREPL antibody detects prolyl endopeptidase-like protein, a cytosolic serine peptidase of the prolyl oligopeptidase family. Unlike other family members, PREPL lacks proteolytic activity due to an inactive catalytic triad, but it retains structural features of peptidases. PREPL is expressed widely, with high levels in brain, kidney, and skeletal muscle, and contributes to intracellular peptide processing, protein-protein interactions, and vesicular trafficking.

Research using PREPL antibody has connected the protein to congenital and neurological disorders. Homozygous deletions affecting PREPL cause hypotonia-cystinuria syndrome, a rare genetic condition characterized by severe neonatal hypotonia, growth retardation, cystinuria, and dysmorphic features. The disorder highlights PREPL's importance in neuromuscular function and metabolic regulation. Additional studies suggest PREPL contributes to vesicle-mediated release of neurotransmitters and hormones, implicating it in neuroendocrine regulation.

Functional studies in animal models have revealed that PREPL knockout mice exhibit growth retardation, motor abnormalities, and altered metabolic phenotypes, consistent with findings in human patients. PREPL has also been implicated in skeletal muscle function, further supporting its role in neuromuscular biology.

PREPL has emerging links to cancer and metabolic disease. Abnormal expression has been detected in certain tumors, although its precise role remains under investigation. Its involvement in vesicular trafficking and peptide regulation suggests PREPL may influence signaling pathways related to growth and proliferation.

Antibodies against PREPL are validated for western blot, immunofluorescence, and immunohistochemistry. These reagents enable reliable detection of PREPL in tissue and cell-based studies, supporting research into peptide regulation, vesicular biology, and neuromuscular disease. Clone-based antibodies provide specificity required for reproducibility in complex biological samples.

NSJ Bioreagents supplies this PREPL antibody for research on congenital disease, metabolism, and neurobiology.

## Application Notes

Optimal dilution of the PREPL antibody should be determined by the researcher.

## Immunogen

A synthesized peptide derived from human PREPL was used as the immunogen for the PREPL antibody.

## Storage

Store the PREPL antibody at -20oC.