

Mouse Anti-PTPN2 antibody

SLM-60446M

Product Name PTPN2

Chinese Name 酪氨酸蛋白磷酸酶非受体 2 型单克隆抗体

Alias PTN2_HUMAN; Tyrosine-protein phosphatase non-receptor type 2; PTPT; EC:3.1.3.48; T-cell protein-tyrosine phosphatase (TCPTP); protein tyrosine phosphatase non-receptor type 2; PTN2; TC-PTP; TCELLPTP;

Research Area Signal transduction Kinases and Phosphatases

Immunogen Species Mouse

Clonality Monoclonal

Clone NO. F3H2

React Species Human,Mouse,Rat

Applications WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500,Flow-Cyt=1:50-100,Flow-
(Paraffin sections need antigen repair)
not yet tested in other applications.
optimal dilutions/concentrations should be determined by the end user.

Cellular localization The nucleus cytoplasmic The cell membrane

Form Liquid

Concentration 1mg/ml

Isotype IgG1/Kappa

Purification Affinity purified by Protein G

Buffer Solution 1M TBS(pH7.4) with 1% BSA, 3% Proclin300 and 50% Glycerol.

Storage Shipped at 4°C. Store at -20 °C for one year. Avoid repeated freeze/thaw cycles.

Attention This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

PubMed [PubMed](#)

Product Detail

The protein encoded by this gene is a member of the protein tyrosine phosphatase (PTP) family. Members of this 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, mitosis, and oncogenic transformation. Epidermal growth factor receptor and the adaptor protein Shc were reported to

of this PTP, which suggested the roles in growth factor mediated cell signaling. Multiple alternatively spliced variants encoding different isoforms have been found. Two highly related but distinctly processed pseudogenes localize to chromosomes 1 and 13, respectively, have been reported. [provided by RefSeq, May 2011]

Subcellular Location:

[Isoform 2]: Nucleus. Cytoplasm. Cell membrane. Note=Predominantly localizes to chromatin (1). Able to shuttle between the nucleus and the cytoplasm and to dephosphorylate plasma membrane proteins (PubMed:9488479). Recruited by activated ITGA1 at the plasma membrane. {ECO:0000250, ECO:0000269|PubMed:9488479}.

Tissue Specificity:

Ubiquitously expressed. Isoform 2 is probably the major isoform. Isoform 1 is expressed in T-cells and placenta.

SWISS:

P17706

Gene ID:

5771

Database links:

[Entrez Gene: 5771](#) Human

[Entrez Gene: 19255](#) Mouse

[Entrez Gene: 117063](#) Rat

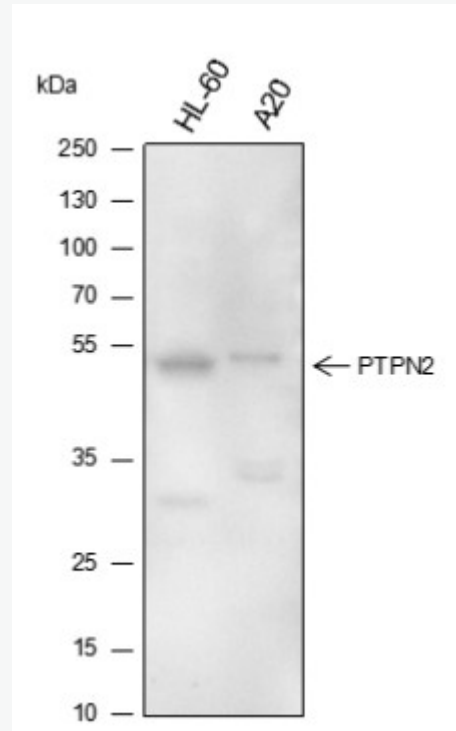
[SwissProt: P17706](#) Human

[SwissProt: Q06180](#) Mouse

[SwissProt: P35233](#) Rat

去磷酸化受体蛋白酪氨酸激酶的非受体型酪氨酸特异性磷酸酶，包括 INSR、EGFR、CSF1R、PDGFR。在 The nucleus 或细胞质中也去磷酸化非受体蛋白酪氨酸激酶，如 JAK1、JAK2、SH2 家族激酶、STAT1、STAT3 和 STAT6。能够负调控许多信号通路和生物过程，如造血，细胞增殖和分化，葡萄糖稳态。在免疫系统的发育中起着多方面的重要作用，通过 FYN 和 SH2 磷酸化来控制 T 细胞的分化和活化，在 T 细胞受体 Signal transduction 中发挥作用。去磷酸化受体蛋白酪氨酸激酶负调控其下游信号和巨噬 Cell differentiation。通过细胞质激酶 JAK1、JAK3 及其底物 STAT3 负调控 cell factor (IL2/白介素-2 和 Interferon) 介导的信号传导，这些激酶在 cell factor 受体介导的信号传导中发挥作用。

**Product
Picture**



Blocking buffer: 5% NFDM/TBST

Primary ab dilution: 1:5000

Primary ab incubation condition: room temperature 2h

Secondary ab: Goat Anti-Mouse IgG H&L (HRP)

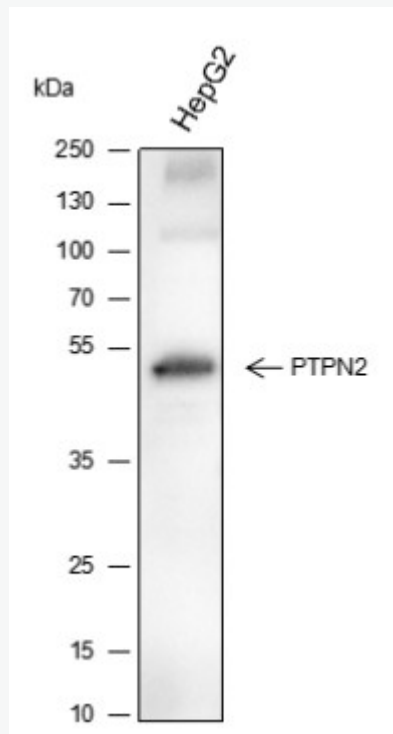
Lysate: HL-60, A20

Protein loading quantity: 20 μ g

Exposure time: 10 s

Predicted MW: 45-50 kDa

Observed MW: 45-50 kDa



Blocking buffer: 5% NFDM/TBST

Primary ab dilution: 1:5000

Primary ab incubation condition: room temperature 2h

Secondary ab: Goat Anti-Mouse IgG H&L (HRP)

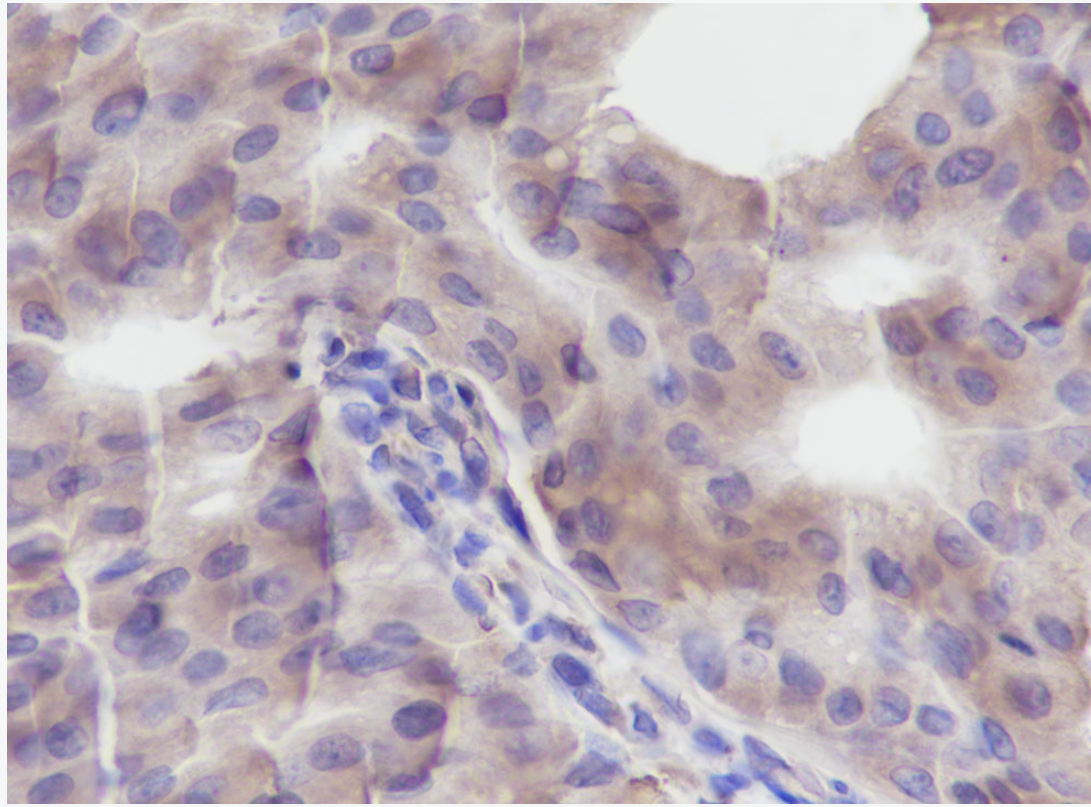
Lysate: HepG2

Protein loading quantity: 20 μ g

Exposure time: 10 s

Predicted MW: 45-50 kDa

Observed MW: 45-50 kDa



Tissue: Human breast cancer

Section type: Formalin fixed & Paraffin -embedded section

Retrieval method: High temperature and high pressure

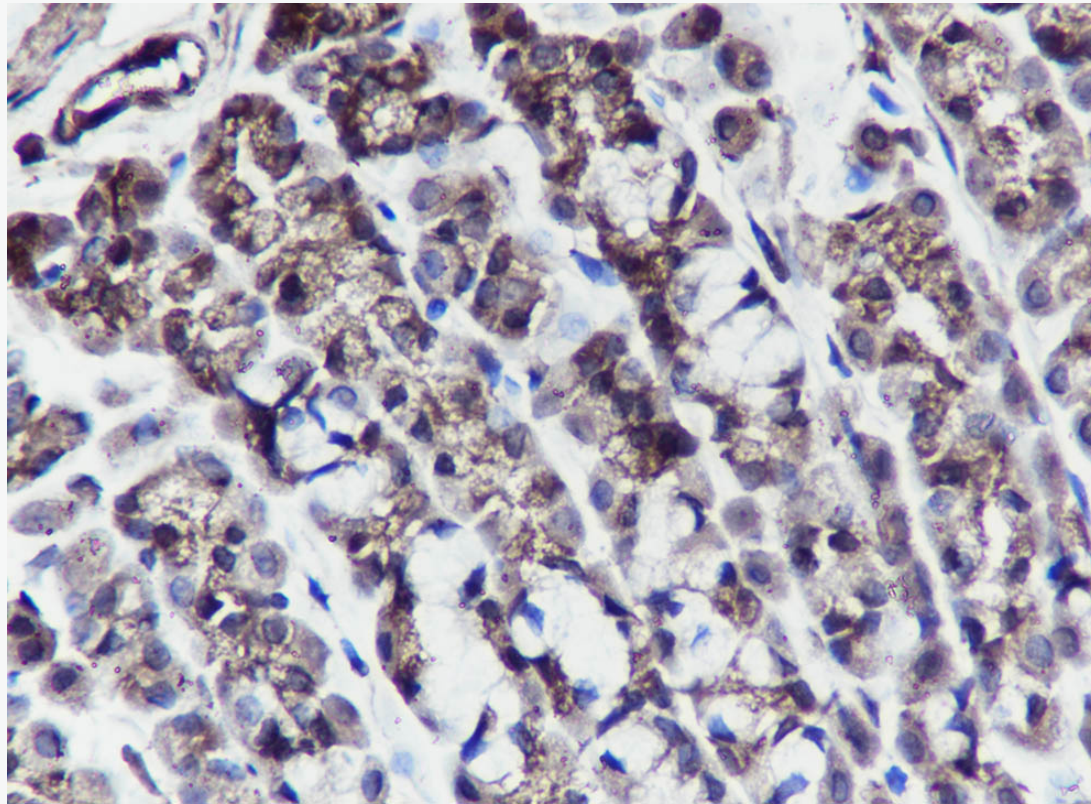
Retrieval buffer: Tris/EDTA buffer, pH 9.0 Primary ab dilution: 1:100

Primary ab incubation condition: 1 hour at room temperature

Secondary ab: SP Kit(Mouse)(sp-0024)

Counter stain: Hematoxylin (Blue)

Comment: Color brown is the positive signal for SLM-60446M



Tissue: Rat stomach

Section type: Formalin fixed & Paraffin -embedded section

Retrieval method: High temperature and high pressure

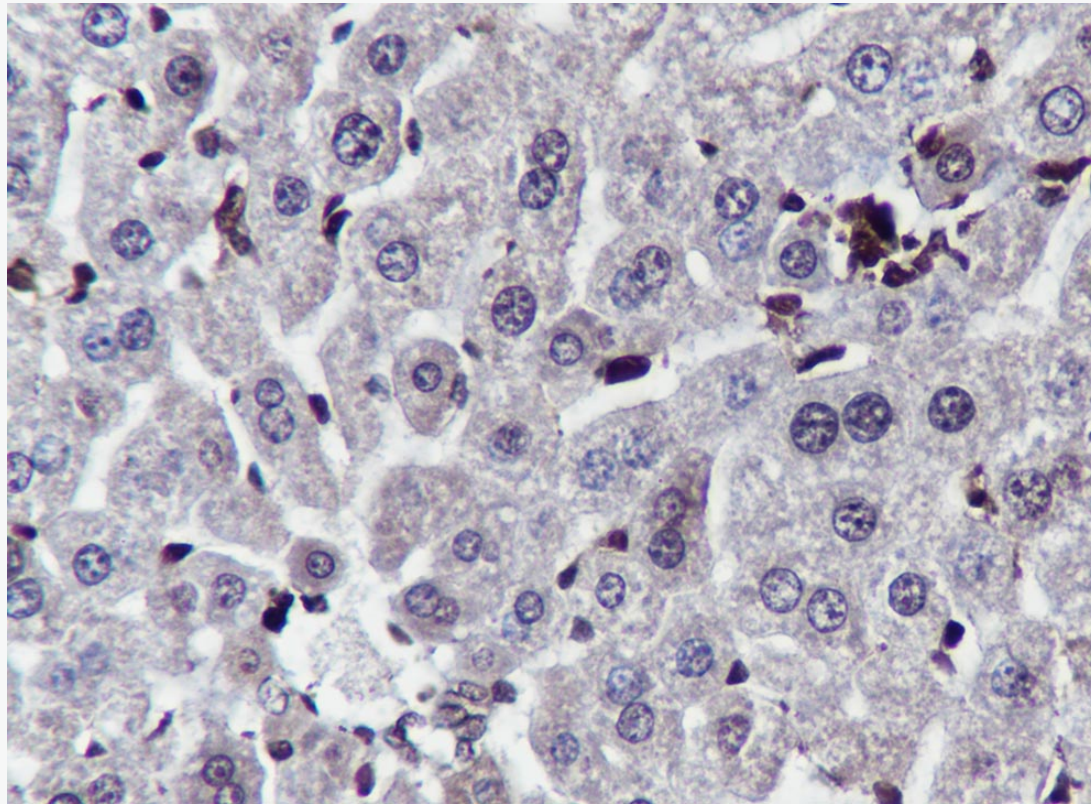
Retrieval buffer: Tris/EDTA buffer, pH 9.0 Primary ab dilution: 1:100

Primary ab incubation condition: 1 hour at room temperature

Secondary ab: SP Kit(Mouse)(sp-0024)

Counter stain: Hematoxylin (Blue)

Comment: Color brown is the positive signal for SLM-60446M



Tissue: Mouse liver

Section type: Formalin fixed & Paraffin -embedded section

Retrieval method: High temperature and high pressure

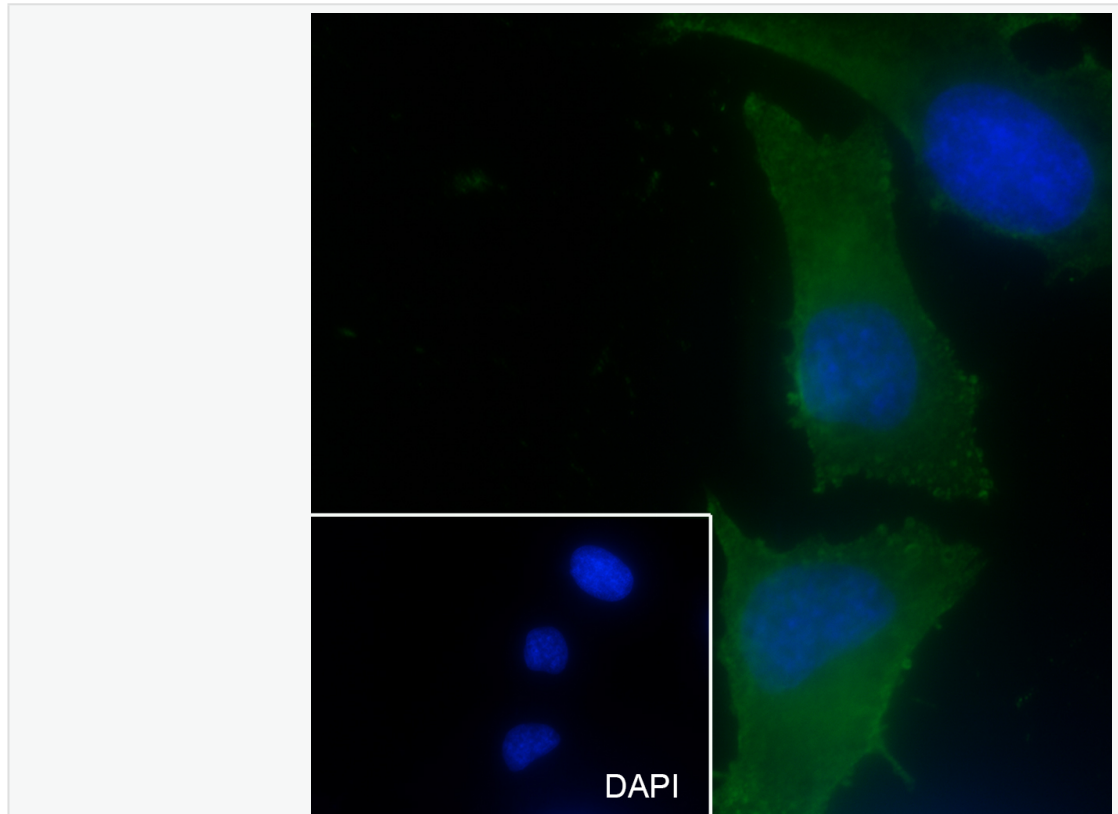
Retrieval buffer: Tris/EDTA buffer, pH 9.0 Primary ab dilution: 1:100

Primary ab incubation condition: 1 hour at room temperature

Secondary ab: SP Kit(Mouse)(sp-0024)

Counter stain: Hematoxylin (Blue)

Comment: Color brown is the positive signal for SLM-60446M



Cell line: HeLa

Fixative: 4% Paraformaldehyde

Permeabilization: 0.1% TritonX-100

Primary ab dilution: 1:50

Primary incubation condition: 4°C overnight

Secondary ab: Goat Anti-Mouse IgG

Nuclear counter stain: DAPI (Blue)

Comment: Color green is the positive signal for SLM-60446M