

# Rabbit Anti-Acid Phosphatase antibody

# SL6291R

Product Name:	Acid Phosphatase
Chinese Name:	酸性磷酸酶抗体
Alias:	Acid phosphatase 1 soluble; Acid phosphatase of erythrocyte; Adipocyte acid phosphatase; Cytoplasmic phosphotyrosyl protein phosphatase; HAAP; Low molecular weight phosphotyrosine protein phosphatase; PAP1; PAP2; Protein tyrosine phosphatase; PTPase; Purple acid phosphatase; Red cell acid phosphatase 1; PPAC_HUMAN.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat, Dog, Pig, Cow, Horse, Rabbit,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	18kDa
Cellular localization:	cytoplasmic
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human Acid Phosphatase:71-158/158
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20 °C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	<u>PubMed</u>
Product Detail:	Phosphatase enzymes catalyse hydrolysis of phosphoric acid esters of various alcohols, e.g. a hexose phosphate, to yield the alcohol and free inorganic phosphate. This may be a way of recycling phosphate in the cell, and the level of phosphate may be elevated under

conditions of phosphate starvation (in algae for example). Acid phosphatases have pH optima below 7, whereas alkaline phosphatases are most active above pH 7. Commercial quantities of acid phosphatase are obtained from plant sources e.g. potato and wheat germ, whereas similar quantities of alkaline phosphatase are obtained from animal intestine and bacteria.

#### **Function:**

Acts on tyrosine phosphorylated proteins, low-MW aryl phosphates and natural and synthetic acyl phosphates. Isoform 3 does not possess phosphatase activity.

#### **Subunit:**

Isoform 1 interacts with the SH3 domain of SPTAN1. There is no interaction observed for isoforms 2 or 3. Interacts with EPHA2; dephosphorylates EPHA2. Interacts with EPHB1.

#### **Subcellular Location:**

Cytoplasm.

#### Tissue Specificity:

T-lymphocytes express only isoform 2

## Similarity:

Belongs to the low molecular weight phosphotyrosine protein phosphatase family.

## **SWISS:**

P24666

#### Gene ID:

52

# Database links:

Entrez Gene: 52Human

Entrez Gene: 11431 Mouse

Entrez Gene: 631286Mouse

Entrez Gene: 24161Rat

Omim: 171500Human

SwissProt: P24666Human

SwissProt: Q9D358Mouse

SwissProt: P41498Rat

Unigene: 558296Human

Unigene: 359831 Mouse

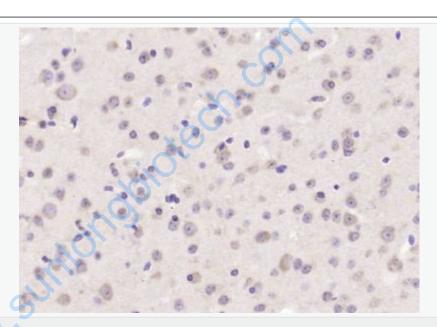
Unigene: 108187Rat

Unigene: 202830Rat

Unigene: 220315Rat

# **Important Note:**

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



#### Picture:

Paraformaldehyde-fixed, paraffin embedded (mouse brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (Acid Phosphatase) Polyclonal Antibody, Unconjugated (SL6291R) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.