



Rabbit Anti-Phospho1 antibody

SL12562R

Product Name:	Phospho1
Chinese Name:	细胞质磷酸酶1抗体
Alias:	EC 3.1.3.75; PHOP1_HUMAN; Phosphatase orphan 1; Phosphatase, orphan 1; Phospho 1; Phosphoethanolamine/phosphocholine phosphatase.
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=1:400-800ICC=1:100-500IF=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:	30kDa
Cellular localization:	cytoplasmic
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human Phospho1:201-267/267
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:	PubMed
Product Detail:	PHOSPHO1 is a 267 amino acid phosphatase that is a member of the haloacid dehalogenase (HAD) superfamily of magnesium-dependent hydrolases. PHOSPHO1 is highly expressed in bone and cartilage and localizes to the osteoid layer of the periosteum. PHOSPHO1 is restricted to sites of mineralization and its inhibition decreases the ability of matrix vesicles to calcify in bone, suggesting that the protein may play a role in the matrix mineralization process during skeletal development.

PHOSPHO1 cleaves phosphoethanolamine and phosphocholine to generate inorganic phosphate for bone mineralization. PHOSPHO1 contains three catalytic motifs that are conserved within the haloacid dehalogenase superfamily.

Function:

Phosphatase that has a high activity toward phosphoethanolamine (PEA) and phosphocholine (PCho). Involved in the generation of inorganic phosphate for bone mineralization.

Tissue Specificity:

Expressed at sites of mineralization in bone and cartilage. Highly expressed in osteoblast cell line SaOS-2 which produces a mineralized matrix, but not in MG-63 cell line, which do not mineralize.

Similarity:

Belongs to the HAD-like hydrolase superfamily. PHOSPHO family.

SWISS:

Q8TCT1

Gene ID:

162466

Database links:

[Entrez Gene: 162466](#)Human

[Entrez Gene: 237928](#)Mouse

[Entrez Gene: 287644](#)Rat

[SwissProt: Q8TCT1](#)Human

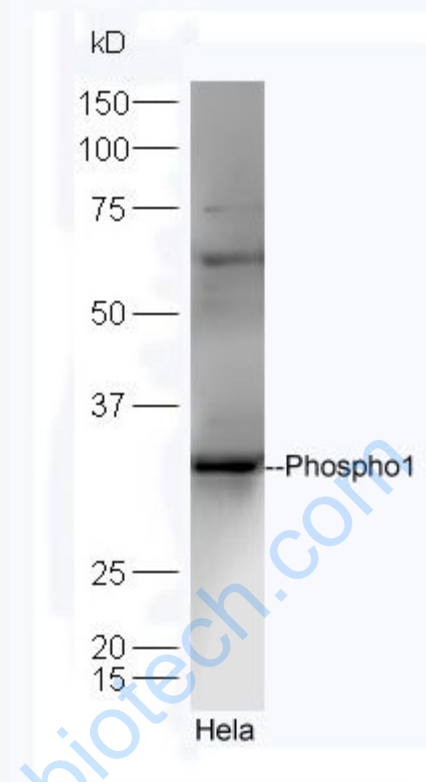
[SwissProt: Q8R2H9](#)Mouse

[SwissProt: B5DFB9](#)Rat

Important Note:

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

Picture:



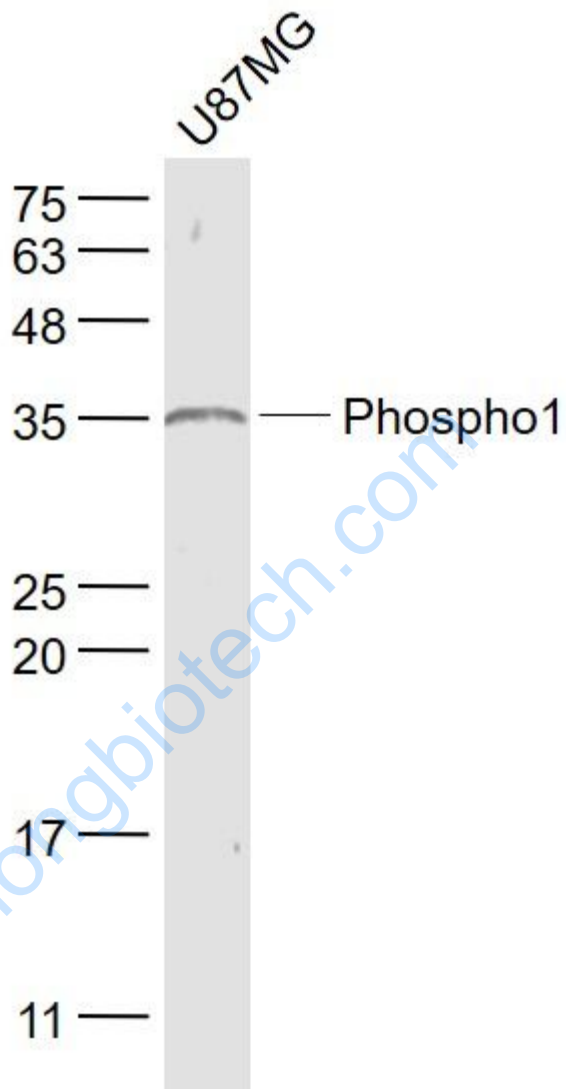
Sample: HeLa Cell (Human) Lysate at 40 ug

Primary: Anti-Phospho1 (SL12562R) at 1/300 dilution

Secondary: HRP conjugated Goat-Anti-rabbit IgG (SL12562R) at 1/5000 dilution

Predicted band size: 30 kD

Observed band size: 30 kD



Sample:

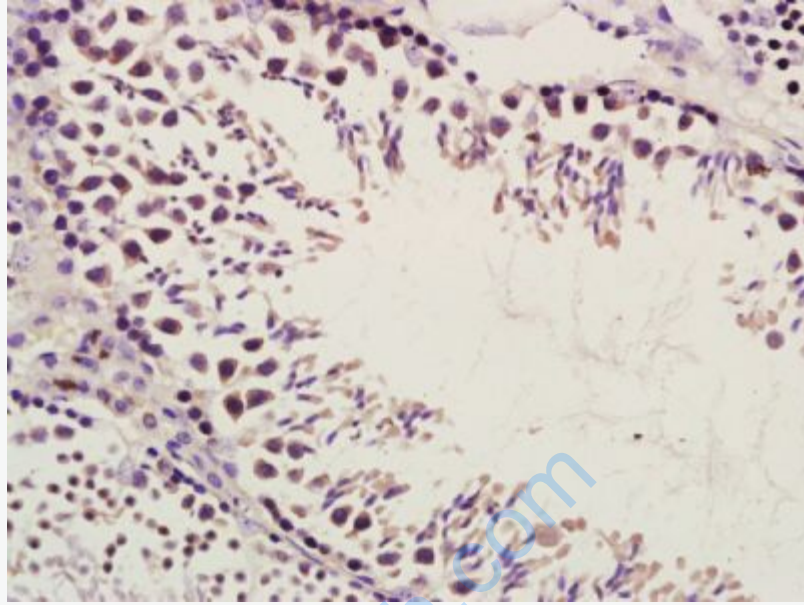
U87MG(Human) Cell Lysate at 30 ug

Primary: Anti- Phospho1 (SL12562R) at 1/1000 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 30 kD

Observed band size: 35 kD



Paraformaldehyde-fixed, paraffin embedded (Mouse testis); 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 (Phospho1) Polyclonal Antibody, Unconjugated (SL12562R) at 1:500 overnight at 4°C, followed by a conjugated secondary (sp-0023) for 20 minutes and DAB staining.