

Phospho1 Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP54888

Specification

Phospho1 Polyclonal Antibody - Product Information

Application WB, IHC-P Primary Accession OSTCT1

Reactivity Rat, Pig, Dog, Bovine

Host Rabbit
Clonality Polyclonal
Calculated MW 29713

Phospho1 Polyclonal Antibody - Additional Information

Gene ID 162466

Other Names

Phosphoethanolamine/phosphocholine phosphatase, 3.1.3.75, PHOSPHO1

Format

0.01M TBS(pH7.4), 0.09% (W/V) sodium azide and 50% Glyce

Storage

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

Phospho1 Polyclonal Antibody - Protein Information

Name PHOSPHO1 {ECO:0000303|PubMed:12464021, ECO:0000312|HGNC:HGNC:16815}

Function

Phosphatase that has a high activity toward phosphoethanolamine (PEA) and phosphocholine (PCho) (PubMed:15175005). Involved in the generation of inorganic phosphate for bone mineralization (By similarity). Acts in a non-redundant manner with PHOSPHO1 in skeletal mineralization: while PHOSPHO1 mediates the initiation of hydroxyapatite crystallization in the matrix vesicles (MVs), ALPL/TNAP catalyzes the spread of hydroxyapatite crystallization in the extracellular matrix (By similarity).

Cellular Location

Extracellular vesicle {ECO:0000250|UniProtKB:Q8R2H9}. Note=Localizes to special class of extracellular vesicles, named matrix vesicles (MVs), which are released by osteogenic cells. {ECO:0000250|UniProtKB:Q8R2H9}

Tissue Location

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.

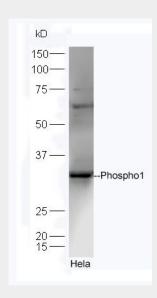


Phospho1 Polyclonal Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

Phospho1 Polyclonal Antibody - Images

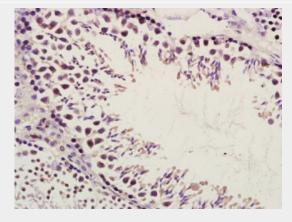


Sample: Hela Cell (Human) Lysate at 40 ug

Primary: Anti-Phospho1 (bs-12562R) at 1/300 dilution

Secondary: HRP conjugated Goat-Anti-rabbit IgG (bs-0295G-HRP) at 1/5000 dilution

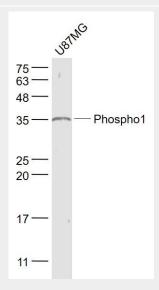
Predicted band size: 30 kD Observed band size: 30 kD



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 (bs-12562R) at 1:500 overnight at 4°C, followed by a conjugated secondary (sp-0023) for 20 minutes and DAB staining.



Sample:

U87MG(Human) Cell Lysate at 30 ug

Primary: Anti- Phospho1 (bs-12562R) at 1/1000 dilution

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

Predicted band size: 30 kD Observed band size: 35 kD