Anti-Alkaline Phosphatase Antibody [SA40-00] - BSA and Azide free

HA750013

Product Type:	Recombinant Rabbit monoclonal IgG, primary antibodies
Species reactivity:	Human, Mouse, Rat
Applications:	WB, IHC-P, IF-Tissue
Molecular Wt:	Predicted band size: 57 kDa
Clone number:	SA40-00

Description: This gene encodes a member of the alkaline phosphatase family of proteins. There are at least four distinct but related alkaline phosphatases: intestinal, placental, placental-like, and liver/bone/kidney (tissue non-specific). The first three are located together on chromosome 2, while the tissue non-specific form is located on chromosome 1. The product of this gene is a membrane bound glycosylated enzyme that is not expressed in any particular tissue and is, therefore, referred to as the tissue-nonspecific form of the enzyme. Alternative splicing results in multiple transcript variants, at least one of which encodes a preproprotein that is proteolytically processed to generate the mature enzyme. This enzyme may play a role in bone mineralization. Mutations in this gene have been linked to hypophosphatasia, a disorder that is characterized by hypercalcemia and skeletal defects.

Immunogen: Synthetic peptide within human Alkaline Phosphatase aa 18-50.

Positive control: Saos-2 cell lysate, HeLa cell lysate, A549 cell lysate, Mouse liver tissue lysate, Rat liver tissue lysate, HepG2, SW480, mouse kidney tissue, mouse jawbone tissue, rat liver tissue, mouse liver tissue, Hela.

Subcellular location: Cell membrane, Mitochondrion membrane, Mitochondrion intermembrane space, Extracellular vesicle membrane.

Database links: SwissProt: P05186 Human | P09242 Mouse | P08289 Rat

Recommended Dilutions:

WB	1:5,000
IHC-P	1:1,000-1:8,000
IF-Tissue	1:200

Storage Buffer: 1*PBS (pH7.4).

Storage Instruction: Store at +4℃ after thawing. Aliquot store at -20℃ or -80℃. Avoid repeated freeze / thaw cycles.

Purity: Protein A affinity purified.

Images

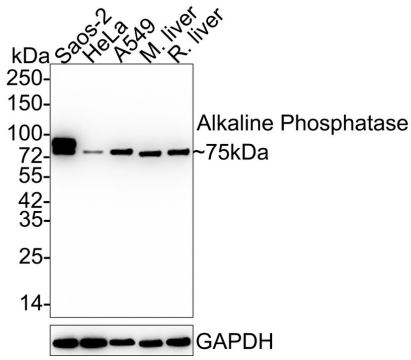

Fig1: Western blot analysis of Alkaline Phosphatase on different lysates with Rabbit anti-Alkaline Phosphatase antibody (HA750013) at 1/5,000 dilution.

Lane 1: Saos-2 cell lysate (15 µg/Lane)
Lane 2: HeLa cell lysate (15 µg/Lane)
Lane 3: A549 cell lysate (15 µg/Lane)
Lane 4: Mouse liver tissue lysate (20 µg/Lane)
Lane 5: Rat liver tissue lysate (20 µg/Lane)

Predicted band size: 57 kDa
Observed band size: 75 kDa
Exposure time: 24 seconds; ECL: K1801;
4-20% SDS-PAGE gel.

Proteins were transferred to a PVDF membrane and blocked with 5% NFDM/TBST for 1 hour at room temperature. The primary antibody (HA750013) at 1/5,000 dilution was used in 5% NFDM/TBST at 4℃ overnight. Goat Anti-Rabbit IgG - HRP Secondary Antibody (HA1001) at 1:50,000 dilution was used for 1 hour at room temperature.

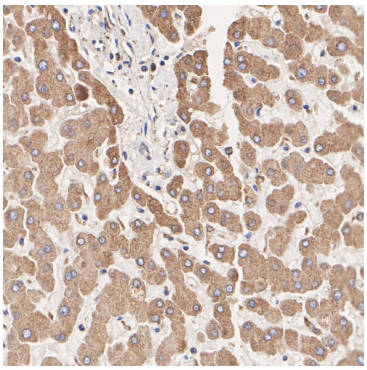

Fig2: Immunohistochemical analysis of paraffin-embedded human liver tissue with Rabbit anti-Alkaline Phosphatase antibody (HA750013) at 1/8,000 dilution.

The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 20 minutes. The tissues were blocked in 1% BSA for 20 minutes at room temperature, washed with ddH_2O and PBS, and then probed with the primary antibody (HA750013) at 1/8,000 dilution for 1 hour at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.

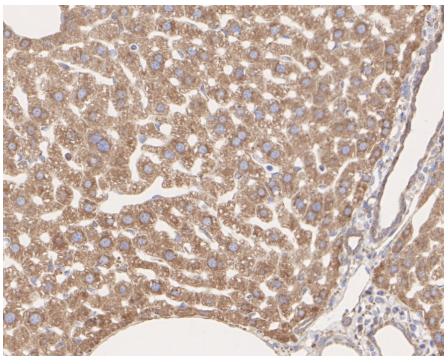

Fig3: Immunohistochemical analysis of paraffin-embedded mouse liver tissue with Rabbit anti-Alkaline Phosphatase antibody (HA750013) at 1/8,000 dilution.

The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 20 minutes. The tissues were blocked in 1% BSA for 20 minutes at room temperature, washed with ddH_2O and PBS, and then probed with the primary antibody (HA750013) at 1/8,000 dilution for 1 hour at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.

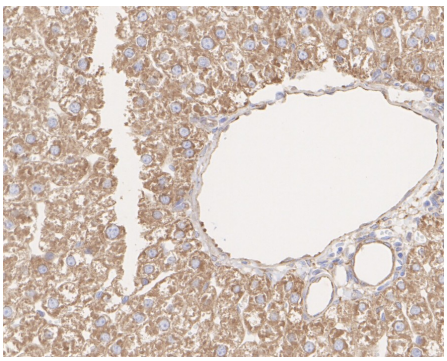

Fig4: Immunohistochemical analysis of paraffin-embedded rat liver tissue with Rabbit anti-Alkaline Phosphatase antibody (HA750013) at 1/8,000 dilution.

The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 20 minutes. The tissues were blocked in 1% BSA for 20 minutes at room temperature, washed with ddH_2O and PBS, and then probed with the primary antibody (HA750013) at 1/8,000 dilution for 1 hour at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.

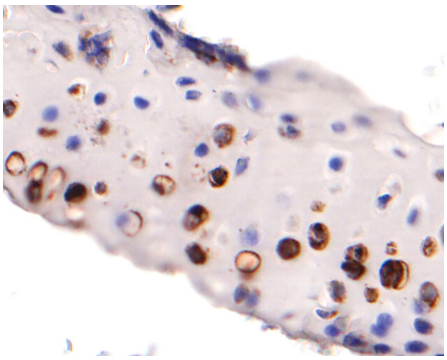

Fig5: Immunohistochemical analysis of paraffin-embedded mouse jawbone tissue with Rabbit anti-Alkaline Phosphatase antibody (HA750013) at 1/200 dilution.

The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 20 minutes. The tissues were blocked in 1% BSA for 20 minutes at room temperature, washed with ddH_2O and PBS, and then probed with the primary antibody (HA750013) at 1/200 dilution for 1 hour at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.

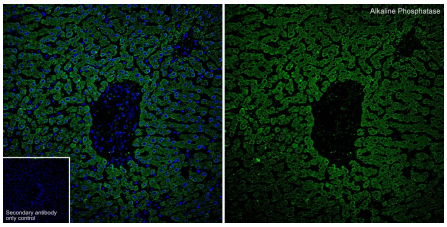

Fig6: Application: IF-Tissue

Species: Human

Site: liver

Sample: Paraffin-embedded section

Antibody concentration: 1/200

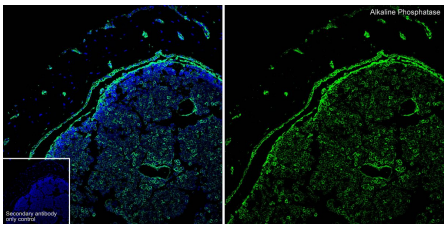

Fig7: Application: IF-Tissue

Species: Mouse

Site: bone

Sample: Paraffin-embedded section

Antibody concentration: 1/200

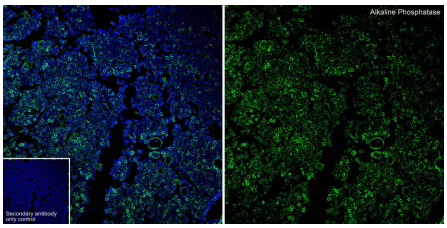

Fig8: Application: IF-Tissue

Species: Mouse

Site: bone

Sample: Paraffin-embedded section

Antibody concentration: 1/200

Note: All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE".

Background References

1. Chen M. et. al. Low-dose X-ray irradiation promotes osteoblast proliferation, differentiation and fracture healing. PLoS One 9:e104016 (2014).