Product name: Anti-Alkaline Phosphatase, Tissue Non-Specific antibody [2F4] ab126820

Description: Mouse monoclonal [2F4] to Alkaline Phosphatase, Tissue Non-Specific

Host species: Mouse

Tested applications: Suitable for: WB, ELISA, IHC-P, Flow Cyt, ICC/IF

Species reactivity: Reacts with: Human

Immunogen: Recombinant fragment corresponding to Human Alkaline Phosphatase, Tissue Non-Specific. expressed in E.coli

Database link: P05186

Positive control: Recombinant Human ALPL protein (AA: 18-502), HeLa and NTERA-2 cell lysates. This antibody gave a positive result when used in the following formaldehyde/methanol fixed cell lines: HepG2

General notes: This product was changed from ascites to supernatant. Lot no’s higher than GR307490-5 are from Tissue Culture Supernatant

The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.

If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As

Properties

Form: Liquid

Storage instructions: Shipped at 4°C. Store at -20°C.

Storage buffer: Preservative: 0.05% Sodium azide
Constituent: 99% PBS

Purity: Protein G purified

Purification notes: Purified from tissue culture supernatant.
Clonality: Monoclonal  
Clone number: 2F4  
Isotype: IgG1

Applications

**The Abpromise guarantee**  
Our *Abpromise guarantee* covers the use of ab126820 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

<table>
<thead>
<tr>
<th>Application</th>
<th>Abreviews</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>WB</td>
<td></td>
<td>1/500 - 1/2000. Detects a band of approximately 57.3, 78.9 kDa (predicted molecular weight: 57, 78.9 kDa).</td>
</tr>
<tr>
<td>ELISA</td>
<td></td>
<td>1/10000.</td>
</tr>
<tr>
<td>IHC-P</td>
<td></td>
<td>1/200 - 1/1000.</td>
</tr>
<tr>
<td>Flow Cyt</td>
<td></td>
<td>1/200 - 1/400. <em>ab170190</em> - Mouse monoclonal IgG1, is suitable for use as an isotype control with this antibody.</td>
</tr>
<tr>
<td>ICC/IF</td>
<td></td>
<td>1/100.</td>
</tr>
</tbody>
</table>

Target

**Function**  
This isozyme may play a role in skeletal mineralization.

**Involvement in disease**  
Hypophosphatasia  
Hypophosphatasia childhood type  
Hypophosphatasia infantile type

**Sequence similarities**  
Belongs to the alkaline phosphatase family.

**Post-translational modifications**  
N-glycosylated.

**Cellular localization**  
Cell membrane.

Images
Western blot - Anti-Alkaline Phosphatase, Tissue Non-Specific antibody [2F4] (ab126820)

**All lanes:** Anti-Alkaline Phosphatase, Tissue Non-Specific antibody [2F4] (ab126820) at 1/500 dilution

**Lane 1:** Wild-type HAP1 whole cell lysate

**Lane 2:** ALPL knockout HAP1 whole cell lysate

**Lane 3:** Saos2 whole cell lysate

Lysates/proteins at 20 µg per lane.

**Predicted band size:** 57, 78.9 kDa

**Lanes 1 - 3:** Merged signal (red and green). Green - ab126820 observed at 80 kDa. Red - loading control, **ab181602**, observed at 37 kDa.

ab126820 was shown to specifically react with ALPL in wild-type HAP1 cells as signal was lost in ALPL knockout cells. Wild-type and ALPL knockout samples were subjected to SDS-PAGE. The membrane was blocked with 3% Milk. Ab126820 and **ab181602** (Rabbit anti-GAPDH loading control) were incubated overnight at 4°C at 1/500 dilution and 1/20000 dilution respectively. Blots were developed with Goat anti-Mouse IgG H&L (IRDye® 800CW) preabsorbed **ab216772** and Goat anti-Rabbit IgG H&L (IRDye® 680RD) preabsorbed **ab216777** secondary antibodies at 1/20000 dilution for 1 hour at room temperature before imaging.
Western blot - Anti-Alkaline Phosphatase, Tissue Non-Specific antibody [2F4] (ab126820) at 1/500 dilution + Recombinant Human protein ALPL (AA: 18-502)

**Predicted band size:** 57, 78.9 kDa

ICC/IF image of ab126820 stained HepG2 cells. The cells were 4% formaldehyde fixed (10 min) and then incubated in 1%BSA / 10% normal goat serum / 0.3M glycine in 0.1% PBS-Tween for 1h to permeabilise the cells and block non-specific protein-protein interactions. The cells were then incubated with the antibody ab126820 at 1/100 dilution overnight at +4°C. The secondary antibody (green) was DyLight® 488 goat anti- mouse (ab96879) IgG (H+L) used at a 1/250 dilution for 1h. Alexa Fluor® 594 WGA was used to label plasma membranes (red) at a 1/200 dilution for 1h. DAPI was used to stain the cell nuclei (blue) at a concentration of 1.43µM. This antibody also gave a positive result in methanol fixed (100%, 5min) hepG2 cells used at 1/100 dilution.
**Western blot - Anti-Alkaline Phosphatase, Tissue Non-Specific antibody [2F4] (ab126820)**

All lanes: Anti-Alkaline Phosphatase, Tissue Non-Specific antibody [2F4] (ab126820) at 1/500 dilution

Lane 1: HeLa cell lysate
Lane 2: NTERA-2 cell lysate

Predicted band size: 57, 78.9 kDa

**ELISA - Anti-Alkaline Phosphatase, Tissue Non-Specific antibody [2F4] (ab126820)**

Example of standard curves obtained using ab126820. Control antigen 100ng (black), antigen at 10ng (purple), antigen at 50ng (blue), antigen at 100ng (red)

**Flow Cytometry - Anti-Alkaline Phosphatase, Tissue Non-Specific antibody [2F4] (ab126820)**

Flow cytometric analysis of MCF-7 cells using ab126820 at 1/200 (green) and negative control (red).
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Alkaline Phosphatase, Tissue Non-Specific antibody [2F4] (ab126820)

ab126820, at 1/200, staining Alkaline Phosphatase, Tissue Non-Specific in paraffin embedded Human ovarian cancer tissues by Immunohistochemistry with DAB staining.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours

- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit [https://www.abcam.com/abpromise](https://www.abcam.com/abpromise) or contact our technical team.

Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors