## Overview

<table>
<thead>
<tr>
<th><strong>Product name</strong></th>
<th>Anti-Sp7 / Osterix antibody</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Description</strong></td>
<td>Rabbit polyclonal to Sp7 / Osterix</td>
</tr>
<tr>
<td><strong>Host species</strong></td>
<td>Rabbit</td>
</tr>
<tr>
<td><strong>Tested applications</strong></td>
<td>Suitable for: IHC-P</td>
</tr>
<tr>
<td><strong>Species reactivity</strong></td>
<td>Reacts with: Mouse, Rat</td>
</tr>
<tr>
<td><strong>Predicted to work with</strong></td>
<td>Human</td>
</tr>
<tr>
<td><strong>Immunogen</strong></td>
<td>Synthetic peptide corresponding to Mouse Sp7/Osterix aa 400 to the C-terminus (C terminal) conjugated to keyhole limpet haemocyanin. (Peptide available as ab24390)</td>
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<tr>
<td><strong>Positive control</strong></td>
<td>IHC-P: E14 mouse embryo, mouse osteosarcoma, E14 rat embryo, rat femur sections and rat bone tibiae tissue sections.</td>
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</tbody>
</table>

### General notes

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

<table>
<thead>
<tr>
<th><strong>Form</strong></th>
<th>Liquid</th>
</tr>
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<tbody>
<tr>
<td><strong>Storage instructions</strong></td>
<td>Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle.</td>
</tr>
</tbody>
</table>
| **Storage buffer** | pH: 7.40  
Preservative: 0.02% Sodium azide  
Constituent: PBS |

Batches of this product that have a concentration < 1mg/ml may have BSA added as a stabilising agent. If you would like information about the formulation of a specific lot, please contact our scientific support team who will be happy to help.
Purity
Immunogen affinity purified

Clonality
Polyclonal

Isotype
IgG

Applications

The Abpromise guarantee
Our Abpromise guarantee covers the use of ab22552 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>IHC-P</td>
<td>★★★★★ (11)</td>
<td>1/100 - 1/500. Antigen retrieval is not essential but may optimise staining.</td>
</tr>
</tbody>
</table>

Target

Function
Transcriptional activator essential for osteoblast differentiation. Binds to SP1 and EKLF consensus sequences and to other G/C-rich sequences.

Tissue specificity
Restricted to bone-derived cell.

Sequence similarities
Belongs to the Sp1 C2H2-type zinc-finger protein family.
Contains 3 C2H2-type zinc fingers.

Cellular localization
Nucleus.

Images

IHC image of SP7/Osterix staining in a section of formalin-fixed paraffin-embedded normal rat E15 embryo performed on a Leica BOND® system using the standard protocol F. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH6, epitope retrieval solution 1) for 20mins. The section was then incubated with ab22552 at 1µg/ml for 15 mins at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX. The inset secondary-only control image is taken from an identical assay without primary antibody.

For other IHC staining systems (automated and non-automated) customers should optimize variable parameters such as antigen retrieval conditions, primary antibody concentration and antibody incubation times.
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Sp7 / Osterix antibody (ab22552)

IHC image of SP7/Osterix staining in a section of formalin-fixed paraffin-embedded normal mouse E15 embryo performed on a Leica BOND® system using the standard protocol F. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6, epitope retrieval solution 1) for 20 mins. The section was then incubated with ab22552 at 1µg/ml for 15 mins at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX. The inset secondary-only control image is taken from an identical assay without primary antibody.

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ab22552 staining Osterix in rat femur sections by

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections). Tissue was perfusion fixed with 4% PFA in 0.1M phosphate buffer (pH 7.4) via the left ventricle and decalcified in 10% EDTA. Samples were incubated with primary antibody (1/2000) for 12 hours at 4°C. Histofine simple stain rat MAX PO was used as the secondary antibody.
Immunohistochemical analysis of paraffin embedded mouse osteosarcoma tissue labeling Sp7/Osterix with ab22552 at 1/1000 (overnight at 4°C). Fixed 48h in 4% formol. Decalcified in 4% EDTA and 0.2% PFA pH7.4 before inclusion in paraffin. Biotin conjugated secondary 1h RT. Amplification StreptABC, substrate DAB.

The image shows Osterix staining in rat bone tibiae using ab22552 at 1/100.
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

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- We investigate all quality concerns to ensure our products perform to the highest standards

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