Overview

Product name: Anti-Osteopontin antibody [7C5H12]
Description: Mouse monoclonal [7C5H12] to Osteopontin
Host species: Mouse
Tested applications: Suitable for: WB, ELISA, IHC-P
Species reactivity: Reacts with: Human
Predicted to work with: Chimpanzee
Immunogen: Recombinant fragment corresponding to Human Osteopontin aa 167-314.
Sequence:

```
LRSKSKFRRPDIQYPDATDEDITSHMESEELNGAYKAI
PVAQDLNAPSD
WDSRGKDSYETSQQLDDQSAETHSHKQSRLYKRKAND
ESNEHSDVIDSQEL
SKVSREFHSHEFHSHEHEDMLVDPKSKEEDKHLKFRIS
HELDSASSEVN
```
Database link: P10451

Positive control: Human recombinant Osteopontin protein; HEK293 cells transfected with recombinant Human Osteopontin fragment (amino acids 167-314); Human prostate cancer, endometrial cancer and pancreas tissues.

General notes: This product was changed from ascites to supernatant. Lot no’s high than GR206348-21 are from Tissue Culture Supernatant

Properties

Form: Liquid
Storage instructions: Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid repeated freeze / thaw cycles.
Storage buffer: Preservative: 0.05% Sodium azide
Constiuent: 99% PBS
Purity: Protein G purified
Purification notes: Purified from tissue culture supernatant.
Clonality: Monoclonal
Clone number: 7C5H12
Isotype: IgG1

Applications

Our Abpromise guarantee covers the use of ab166709 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>ELISA</td>
<td></td>
<td>1/10000.</td>
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<tr>
<td>IHC-P</td>
<td>★★★★★</td>
<td>1/200 - 1/1000.</td>
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Target

Function: Binds tightly to hydroxyapatite. Appears to form an integral part of the mineralized matrix. Probably important to cell-matrix interaction. Acts as a cytokine involved in enhancing production of interferon-gamma and interleukin-12 and reducing production of interleukin-10 and is essential in the pathway that leads to type I immunity.

Tissue specificity: Bone. Found in plasma.

Sequence similarities: Belongs to the osteopontin family.

Post-translational modifications: Extensively phosphorylated on clustered serine residues. N- and O-glycosylated. Phosphorylation sites are present in the extracellular medium.

Cellular localization: Secreted.
**All lanes**: Anti-Osteopontin antibody [7C5H12] (ab166709) at 1/500 dilution

**Lane 1**: HEK293 cell lysate

**Lane 2**: HEK293 cell lysate, transfected with recombinant Human Osteopontin fragment (amino acids 167-314)

**Predicted band size**: 35 kDa

ab166709 staining Osteopontin in human colon (smooth muscle cells) tissue sections by Immunohistochemistry (IHC-P - formaldehyde-fixed, paraffin-embedded sections). Tissue was fixed with formaldehyde, permeabilized with 0.2% Triton X-100 in PBS and blocked with 5% milk for 30 minutes at room temperature; antigen retrieval was by heat mediation in Tris pH 9.0. Samples were incubated with primary antibody (1/100 in PBS) for 16 hours at 4°C. An undiluted Biotin-conjugated horse anti-mouse IgG polyclonal was used as the secondary antibody.

**Predicted band size**: 35 kDa

Anti-Osteopontin antibody [7C5H12] (ab166709) at 1/500 dilution + recombinant Human Osteopontin protein
Immunohistochemical analysis of paraffin embedded, DAB-stained Human prostate cancer tissue labeling Osteopontin using ab166709 at a 1/200 dilution.

Immunohistochemical analysis of paraffin embedded, DAB-stained Human endometrial cancer tissue, labeling Osteopontin using ab166709 at a 1/200 dilution.

Formalin-fixed, paraffin-embedded human pancreas tissue stained for Osteopontin using ab166709 at 1/100 dilution in immunohistochemical analysis.
Please note: All products are “FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES”

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