**Overview**

**Product name**
Mesenchymal Stromal Cell Marker (CD44, CD45, CD90 CD29, CD105) Antibody Panel - Human

**Product overview**
Mesenchymal Stromal Cell Marker (CD44, CD45, CD90 CD29, CD105) Antibody Panel ab93758 contains antibodies against key human mesenchymal stromal cell markers, and includes a CD44 mouse monoclonal, CD45 rabbit polyclonal, CD90 mouse monoclonal, CD29 rabbit monoclonal and CD105 mouse monoclonal antibody.

The Human Multipotent Mesenchymal Stromal Cell Marker Antibody Panel is designed for the characterization of cultured or isolated human multipotent mesenchymal stromal cells. The panel contains a group of antibodies for the positive (CD105, CD29, CD44, CD90) and negative (CD45) selection of this lineage. Multipotent mesenchymal stromal cells (MSCs) represent a heterogeneous subset of stromal cells. They can be bone marrow-derived or isolated from many other different adult tissues including periosteum, trabecular bone, adipose tissue, and synovium. They exhibit the potential to give rise to cells of diverse lineages including adipocytes, chondrocytes and osteocytes.

**Notes**
Explore our range of antibody sample panels designed to provide you with a variety of trial-size antibodies in a convenient and cost-effective format.

**Properties**

**Storage instructions**
Please refer to protocols.

<table>
<thead>
<tr>
<th>Components</th>
<th>1 units</th>
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<tbody>
<tr>
<td>ab44967 - Anti-CD105 antibody [105C02]</td>
<td>1 x 50µl</td>
</tr>
<tr>
<td>ab6124 - Anti-CD44 antibody [F10-44-2]</td>
<td>1 x 50µg</td>
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<tr>
<td>ab10559 - Anti-CD45 antibody</td>
<td>1 x 50µg</td>
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<tr>
<td>ab23894 - Anti-CD90 / Thy1 antibody [AF-9]</td>
<td>1 x 50µg</td>
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<tr>
<td>ab134179 - Anti-Integrin beta 1 antibody [EPR1040Y]</td>
<td>1 x 10µl</td>
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Overlay histogram showing MCF7 cells stained with ab134179 (red line). The cells were fixed with 4% paraformaldehyde (10 min) and then permeabilized with 0.1% PBS-Tween for 20 min. The cells were then incubated in 1x PBS / 10% normal goat serum / 0.3M glycine to block non-specific protein-protein interactions followed by the antibody (ab134179, 1/1000 dilution) for 30 min at 22°C. The secondary antibody used was a goat anti-rabbit Alexa Fluor® 488 (IgG; H&L) (ab150077) at 1/2000 dilution for 30 min at 22°C. Isotype control antibody (black line) was rabbit IgG (monoclonal) (0.1μg/1x10^6 cells) used under the same conditions. Unlabelled sample (blue line) was also used as a control. Acquisition of >5,000 events were collected using a 20mW Argon ion laser (488nm) and 525/30 bandpass filter.

Asynchronous KM-H2 cells were pelleted and labeled by indirect immunofluorescence. Cells were stained with ab10559 (1/200) for 30min at 4°C, washed and then stained with goat anti-rabbit alexafluor 488 (1/200). Forward/Side scatter were used to eliminate cellular debris. The accompanying marker was applied such that only 2% of the IgG control was positive. Based on the accompanying image, approximately 9.62% of cells exhibited positive staining for anti-CD45. Since KM-H2 have low levels of CD45 transcripts, it is expected that they have low levels of CD45 on their surface which is reflected in the ~9% positive. This image is taken from an Abreview.
Ab6124 staining CD44 on Human Tissue sections (Skin tumor) by IHC-P. Sections were Formaldehyde fixed and subjected to heat mediated antigen retrieval in citric acid prior to blocking with 10% serum for 30 mins at 25°C. The primary antibody was diluted 1/100 in PBS and incubated with the sample overnight at 4°C. A TRITC non-Abcam secondary antibody was used.

Mesenchymal Stromal Cell Marker (CD44, CD45, CD90, CD29 and CD105) Antibody Panel - Human (ab93758)

Why choose a recombinant antibody?
- Research with confidence
- Long-term and scalable supply
- Consistent and reproducible results
- Ethical standards compliant
- Animal-free production
- Success from the first experiment
- Consistent and scalable technology

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

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