

**DESCRIPTION**

|                           |   |
|---------------------------|---|
| <b>Species Reactivity</b> | Human   |
| <b>Specificity</b>        | Detects human MESP1 in direct ELISAs.   |
| <b>Source</b>             | Monoclonal Mouse IgG <sub>1</sub> Clone # 939816  |
| <b>Purification</b>       | Protein A or G purified from cell culture supernatant   |
| <b>Immunogen</b>          | <i>E. coli</i> -derived recombinant human MESP1<br>Met1-Gln85<br>Accession # Q9BRJ9   |
| <b>Formulation</b>        | Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details.<br>*Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS. |

**APPLICATIONS**

**Please Note:** Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the [Technical Information](#) section on our website.

|                     | <b>Recommended Concentration</b> | <b>Sample</b> |
|---------------------|----------------------------------|---------------|
| <b>Western Blot</b> | 2 µg/mL                          | See Below     |

**DATA**

**Western Blot**

**Detection of Human MESP1 by Western Blot.** Western blot shows lysates of Mouse ES cells transfected with human MESP1 untreated (-) or treated (+) with 100 ng/mL Doxycycline for overnight. PVDF membrane was probed with 2 µg/mL of Mouse Anti-Human MESP1 Monoclonal Antibody (Catalog # MAB92192) followed by HRP-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # HAF018). A specific band was detected for MESP1 at approximately 45 kDa (as indicated). This experiment was conducted under reducing conditions and using [Immunoblot Buffer Group 3](#). Cells provided courtesy of Michael Kyba's lab, University of Minnesota.

**PREPARATION AND STORAGE**

|                                |  |
|--------------------------------|--|
| <b>Reconstitution</b>          | Reconstitute at 0.5 mg/mL in sterile PBS.  |
| <b>Shipping</b>                | The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.<br>*Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C   |
| <b>Stability &amp; Storage</b> | <b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b> <ul style="list-style-type: none"> <li>• 12 months from date of receipt, -20 to -70 °C as supplied.</li> <li>• 1 month, 2 to 8 °C under sterile conditions after reconstitution.</li> <li>• 6 months, -20 to -70 °C under sterile conditions after reconstitution.</li> </ul> |

**BACKGROUND**

Mesoderm posterior protein 1 (Mesp-1) is a 268 amino acids protein that in humans is encoded by the MESP1 gene. Mesp-1 was first identified in transcripts enriched in the posterior region of the mouse embryo at embryonic day E7 to E7.5. Lineage tracing in mice showed that Mesp-1 represents the earliest marker of cardiac progenitors and directs multipotential cardiovascular cell fates, patterning mesoderm into cardiac, hematopoietic, or skeletal myogenic progenitors in a context-dependent manner.