

**DESCRIPTION**

<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects human Serpin B5/Maspin in direct ELISAs and Western blots. In direct ELISAs and Western blots, no cross-reactivity with recombinant human Serpin A5, B6, B8 or B9 is observed.
<b>Source</b>	Monoclonal Rat IgG <sub>2B</sub> Clone # 305339
<b>Purification</b>	Protein A or G purified from hybridoma culture supernatant
<b>Immunogen</b>	<i>E. coli</i> -derived recombinant human Serpin B5 Met1-Pro375 Accession # P36952
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *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
<b>Immunoprecipitation</b>	25 µg/mL	Conditioned cell culture medium spiked with Recombinant Human Serpin B5/Maspin, see our available <a href="#">Western blot detection antibodies</a>
<b>Knockout Validated</b>	Serpin B5/Maspin is specifically detected in HeLa human cervical epithelial carcinoma parental cell line but is not detectable in Serpin B5/Maspin knockout HeLa cell line.	

**DATA**

**Western Blot**

**Detection of Human Serpin B5/Maspin by Western Blot.**  
Western blot shows lysates of HeLa human cervical epithelial carcinoma cell line, PC-3 human prostate cancer cell line, and RT-4 human bladder carcinoma cell line. PVDF membrane was probed with 2 µg/mL of Rat Anti-Human Serpin B5/Maspin Monoclonal Antibody (Catalog # MAB2218) followed by HRP-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # HAF018). A specific band was detected for Serpin B5/Maspin at approximately 40 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.

**Knockout Validated**

**Western Blot Shows Human Serpin B5/Maspin Specificity by Using Knockout Cell Line.**  
Western blot shows lysates of HeLa human cervical epithelial carcinoma parental cell line and Serpin B5/Maspin knockout HeLa cell line (KO). PVDF membrane was probed with 2 µg/mL of Rat Anti-Human Serpin B5/Maspin Monoclonal Antibody (Catalog # MAB2218) followed by HRP-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # HAF018). A specific band was detected for Serpin B5/Maspin at approximately 40 kDa (as indicated) in the parental HeLa cell line, but is not detectable in knockout HeLa cell line. GAPDH (Catalog # MAB5718) is shown as a loading control. This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.

**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. *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**

Serpin B5, also known as Maspin, is a secreted member of the Serpin family although it has no known serine protease inhibitor activity. It is produced by mammary epithelial cells and functions as a tumor suppressor. Serpin B5 is a valuable biomarker of tumor progression and overall prognosis. The amino acid sequence of human Serpin B5 is 99%, 92%, 89%, 88% and 64% identical to that of chimpanzee, dog, mouse, rat and chicken.