

## DESCRIPTION

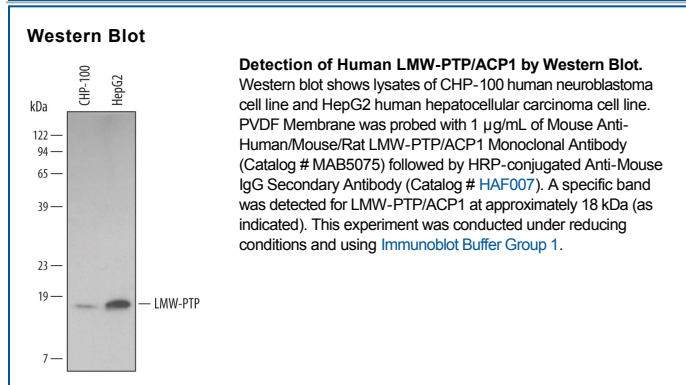
<b>Species Reactivity</b>	Human/Mouse/Rat
<b>Specificity</b>	Detects human, mouse, and rat LMW-PTP/ACP1 in Western blots.
<b>Source</b>	Monoclonal Mouse IgG <sub>2B</sub> Clone # 475417
<b>Purification</b>	Protein A or G purified from hybridoma culture supernatant
<b>Immunogen</b>	<i>E. coli</i> -derived recombinant human LMW-PTP/ACP1 Ala2-His158 Accession # P24666
<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 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.

	Recommended Concentration	Sample
<b>Western Blot</b>	1 µg/mL	See Below

## DATA



## 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

Low molecular weight protein tyrosine phosphatase (LMW-PTP), also known as Acid Phosphatase 1 (ACP1), is an 18 kDa cytosolic phosphatase that is unrelated to other tyrosine phosphatases, such as PTP1B. Tyrosine phosphorylation of LMW-PTP increases its activity 20-fold and affects its ability to dephosphorylate targets such as the PDGF receptor. Cancer cells overexpressing LMW-PTP have a higher proliferative rate and generate tumors that are larger than untransfected controls. Colon adenocarcinomas induced by dimethylhydrazine also have elevated levels of LMW-PTP, suggesting that this phosphatase may be a marker for oncogenic transformation. Human LMW-PTP shares 86% and 87% amino acid sequence identity with mouse and rat LMW-PTP, respectively.