

#### DESCRIPTION

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| <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<br>Ala2-His158<br>Accession # P24666                                                                                                                                                                                 |
| <b>Conjugate</b>          | Alexa Fluor 532<br>Excitation Wavelength: 534 nm<br>Emission Wavelength: 553 nm                                                                                                                                                                                             |
| <b>Formulation</b>        | Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide<br><br>*Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions. |

#### 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.

**Western Blot** Optimal dilution of this antibody should be experimentally determined.

#### PREPARATION AND STORAGE

|                                |                                                                                                                   |
|--------------------------------|-------------------------------------------------------------------------------------------------------------------|
| <b>Shipping</b>                | The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below. |
| <b>Stability &amp; Storage</b> | Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied                          |

#### 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.

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