

## DESCRIPTION

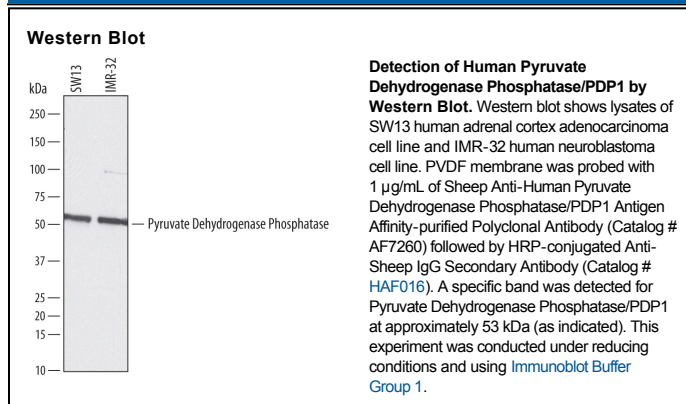
<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects human Pyruvate Dehydrogenase Phosphatase/PDP1 in direct ELISAs and Western blots.
<b>Source</b>	Polyclonal Sheep IgG
<b>Purification</b>	Antigen Affinity-purified
<b>Immunogen</b>	<i>E. coli</i> -derived recombinant human Pyruvate Dehydrogenase Phosphatase/PDP1 Ala72-Glu537 Accession # Q9P0J1
<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>	Sterile PBS to a final concentration of 0.2 mg/mL.
<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

PPM2C (Protein phosphatase mitochondrial 2C; also PDP1) is a 52-54 kDa member of the PP2C family of enzymes. It is expressed in skeletal muscle and adipocytes, and represents one of two subunits that comprise PDP (pyruvate dehydrogenase phosphatase). PPM2C is found within the mitochondrial matrix space where, as part of PDP, it dephosphorylates the E1 component of the pyruvate dehydrogenase complex, resulting in its activation, and the downstream generation of acetyl-CoA and NADH from pyruvate. Human PPM2C is 537 amino acids (aa) in length. It contains a mitochondrion targeting sequence (aa 1-71), followed by a mature region that possesses a catalytic domain between aa 109-440. There are three potential isoform variants. Two contain alternative start sites 25 and 59 aa upstream of the standard start site, respectively. A third shows a 12 aa substitution for aa 105-116. Over aa 72-537, human PPM2C shares 99% aa identity with mouse PPM2C.