

## DESCRIPTION

<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects human NPDC-1 in Western blots.
<b>Source</b>	Polyclonal Sheep IgG
<b>Purification</b>	Antigen Affinity-purified
<b>Immunogen</b>	Mouse myeloma cell line NS0-derived recombinant human NPDC-1 Gly35-Asp181 Accession # Q9NQX5
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution in PBS with BSA as a carrier protein. See Certificate of Analysis for details.

## 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>	0.1 µg/mL	Recombinant Human NPDC-1

## PREPARATION AND STORAGE

<b>Reconstitution</b>	Reconstitute at 0.2 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.
<b>Stability &amp; Storage</b>	<p><b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b></p> <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

NPDC-1 (Neural proliferation differentiation and control protein 1) is a 35 kDa member of the NPDC1/cab1 family of proteins. It is principally expressed in neurons, and serves as an anti-proliferation agent. It may accomplish this, in part, by binding to E2F-1 and blocking its protranscriptional activity. Mature human NPDC-1 is 291 amino acids (aa) in length. It is a type I transmembrane protein that contains an NLS (aa 107-124), an HLH domain (aa 95-128), a transmembrane domain (aa 182-202), and a PEST degradation sequence (aa 269-302). Phosphorylation promotes ubiquitination at this latter site. There are two splice variants. One shows a deletion of aa 242-263, while another shows a nine aa substitution for the nine aa in positions 218-226. Over aa 35-181, human NPDC-1 shares 68% aa identity with mouse NPDC-1.