



Biotinylated Anti-human NPDC-1 Antibody

ORDERING INFORMATION

Catalog Number: BAF5489

Lot Number: CCLY01

Size: 50 µg

Formulation: 0.2 µm filtered solution in PBS with BSA

Storage: -20° C

Reconstitution: sterile 0.1% BSA in TBS

Specificity: human NPDC-1

Immunogen: NS0-derived rhNPDC-1 (aa 35 - 181)

Ig Type: sheep IgG

Application: Western blot

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.

Preparation

Produced in sheep immunized with purified, NS0-derived, recombinant human NPDC-1 (rhNPDC-1; aa 35 - 181; Accession # Q9NQX5). Human NPDC-1 specific IgG was purified by human NPDC-1 affinity chromatography and then biotinylated.

Formulation

Lyophilized from a 0.2 µm filtered solution in phosphate-buffered saline (PBS) containing 50 µg of bovine serum albumin (BSA) per 1 µg of antibody.

Reconstitution

Reconstitute with sterile Tris-buffered saline pH 7.3 (20 mM Trizma base, 150 mM NaCl) containing 0.1% BSA. If 1 mL of buffer is used, the antibody concentration will be 50 µg/mL.

Storage

Lyophilized samples are stable for twelve months from date of receipt when stored at -20° C to -70° C. Upon reconstitution, the antibody can be stored at 2° - 8° C for 1 month without detectable loss of activity. Reconstituted antibody can also be aliquotted and stored frozen at -20° C to -70° C **in a manual defrost freezer** for six months without detectable loss of activity. **Avoid repeated freeze-thaw cycles.**

Specificity

This antibody has been selected for use as a detection antibody in human NPDC-1 Western blots.

Application

Western blot - This antibody can be used at 0.1 - 0.2 µg/mL with the appropriate secondary reagents to detect human NPDC-1. The detection limit for rhNPDC-1 is approximately 2 ng/lane under non-reducing and reducing conditions.

Optimal dilutions should be determined by each laboratory for each application.