

DESCRIPTION

Species Reactivity	Human/Mouse/Rat
Specificity	Detects human, mouse, and rat NIPP1 in Western blots and detects recombinant human NIPP1 in direct ELISAs.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant human NIPP1 Ala2-Ile351 Accession # Q12972
Conjugate	Alexa Fluor 350 Excitation Wavelength: 346 nm Emission Wavelength: 442 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide *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

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

BACKGROUND

NIPP1 (Nuclear Inhibitory polypeptide of Protein Phosphatase 1; also ARD-1 and PPP1R8) is a 41 kDa intracellular protein that belongs to no known molecular family. Although it is ubiquitously expressed, it does undergo alternative splicing, and distinct isoforms are associated with distinct tissues. In the nucleus, NIPP1 complexes with PP1c, targeting it to either RNA or chromatin. This is accompanied by the additional recruitment of other molecules such as Sap155 and PRC2. When nonphosphorylated, NIPP1 blocks PP1c activity; when phosphorylated, NIPP1 allows for PP1c activity, and this impacts the processes of both pre-mRNA splicing and gene silencing. Human NIPP1 is 351 amino acids (aa) in length. It contains an N-terminal FHA domain (aa 49-101), an NLS (aa 185-209), a PP1 binding site (aa 191-210), another NLS (aa 210-240) and an RNA binding site (aa 330-351). There are two potential splice variants. Both possess alternative start sites, one at Met143 (called NIPP1β), and another at Met225 (called ARD-1 or NIPP1γ). Full-length human NIPP1 shares 98% aa sequence identity with mouse NIPP1.

PRODUCT SPECIFIC NOTICES

This product is provided under an agreement between Life Technologies Corporation and R&D Systems, Inc, and the manufacture, use, sale or import of this product is subject to one or more US patents and corresponding non-US equivalents, owned by Life Technologies Corporation and its affiliates. The purchase of this product conveys to the buyer the non-transferable right to use the purchased amount of the product and components of the product only in research conducted by the buyer (whether the buyer is an academic or for-profit entity). The sale of this product is expressly conditioned on the buyer not using the product or its components (1) in manufacturing; (2) to provide a service, information, or data to an unaffiliated third party for payment; (3) for therapeutic, diagnostic or prophylactic purposes; (4) to resell, sell, or otherwise transfer this product or its components to any third party, or for any other commercial purpose. Life Technologies Corporation will not assert a claim against the buyer of the infringement of the above patents based on the manufacture, use or sale of a commercial product developed in research by the buyer in which this product or its components was employed, provided that neither this product nor any of its components was used in the manufacture of such product. For information on purchasing a license to this product for purposes other than research, contact Life Technologies Corporation, Cell Analysis Business Unit, Business Development, 29851 Willow Creek Road, Eugene, OR 97402, Tel: (541) 465-8300. Fax: (541) 335-0354.