

# Rabbit Anti-NIMP/RTN4IP1 antibody

## SL8334R

| Product Name:          | NIMP/RTN4IP1                                                                                                                                                                                                                                                                                                                                        |
|------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Chinese Name:          | NOGO相互作用Mitochondrion蛋白1抗体                                                                                                                                                                                                                                                                                                                          |
| Alias:                 | mitochondrial; NIMP; NOGO interacting mitochondrial protein; NOGO-interacting mitochondrial protein; Reticulon 4 interacting protein 1; Reticulon 4 interacting protein 1, mitochondrial; Reticulon-4-interacting protein 1; RT4I1_HUMAN; Rtn4ip1; NIMP/RTN4IP1.                                                                                    |
| Organism Species:      | Rabbit                                                                                                                                                                                                                                                                                                                                              |
| Clonality:             | Polyclonal                                                                                                                                                                                                                                                                                                                                          |
| React Species:         | Human, Mouse, Rat, Pig, Rabbit,                                                                                                                                                                                                                                                                                                                     |
| Applications:          | WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800IF=1:50-200 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.                                                                                                                         |
| Molecular weight:      | 39kDa                                                                                                                                                                                                                                                                                                                                               |
| Cellular localization: | cytoplasmic Mitochondrion                                                                                                                                                                                                                                                                                                                           |
| Form:                  | Lyophilized or Liquid                                                                                                                                                                                                                                                                                                                               |
| Concentration:         | lmg/ml                                                                                                                                                                                                                                                                                                                                              |
| immunogen:             | KLH conjugated synthetic peptide derived from human NIMP/RTN4IP1:111-210/396                                                                                                                                                                                                                                                                        |
| Lsotype:               | IgG                                                                                                                                                                                                                                                                                                                                                 |
| Purification:          | affinity purified by Protein A                                                                                                                                                                                                                                                                                                                      |
| Storage Buffer:        | 0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.                                                                                                                                                                                                                                                                                    |
| Storage:               | Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20 °C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.                      |
| PubMed:                | <u>PubMed</u>                                                                                                                                                                                                                                                                                                                                       |
| Product Detail:        | Appears to be a potent inhibitor of regeneration following spinal cord injury. Nogo is an oligodendrocyte-specific member of the Reticulon family and is a component of CNS white matter that inhibits axon outgrowth, induces collapse of growth cones of chick dorsal root ganglion cells, and inhibits the spreading of 3T3 fibroblasts. Nogo is |

expressed by oligodendrocytes but not by Schwann cells, and associates primarily with the endoplasmic reticulum. Nogo exists in three different splice forms, Nogo-A, -B and -C. NIMP (NOGO-interacting mitochondrial protein), also known as RTN4IP1 (Reticulon-4-interacting protein 1), is a 396 amino acid mitochondrial protein that contains a C-terminal oxidoreductaselike domain and numerous sites for phosphorylation. NIMP is expressed in mitochondrial-rich tissue such as kidney, heart, skeletal muscle and specific regions within the nervous system. Through interaction with Nogo, it is likely that NIMP plays a role in Nogo-induced inhibition of neurite growth. There are three isoforms of NIMP that are produced as a result of alternative splicing events.

## Function:

Appears to be a potent inhibitor of regeneration following spinal cord injury.

#### **Subunit:**

Interacts with RTN4, UQCRC1 and UQCRC2 (By similarity).

### **Subcellular Location:**

Mitochondrion.

## **Tissue Specificity:**

Widely expressed in mitochondria-enriched tissues. Found in heart, muscle, kidney, liver, brain and placenta.

#### Similarity:

Belongs to the zinc-containing alcohol dehydrogenase family. Quinone oxidoreductase subfamily.

#### **SWISS:**

O8WWV3

#### Gene ID:

84816

#### Database links:

Entrez Gene: 84816 Human

Entrez Gene: 170728 Mouse

Entrez Gene: 309912 Rat

Omim: 610502 Human

SwissProt: O8WWV3 Human

| SwissProt: Q924D0 Mouse Unigene: 155839 Human Unigene: 390253 Mouse Unigene: 220185 Rat  Important Note: This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.  130 95 70 53 40 RTN4IP1 33 25 17                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |          |                                                                                                  |
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| Unigene: 390253 Mouse Unigene: 220185 Rat  Important Note: This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.  130 — 95 — 70 — 53 — 40 — RTN4IP1 33 — 25 —                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |          | SwissProt: Q924D0 Mouse                                                                          |
| Unigene: 390253 Mouse Unigene: 220185 Rat  Important Note: This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.  130 — 95 — 70 — 53 — 40 — RTN4IP1 33 — 25 —                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |          | Unigene: 155839 Human                                                                            |
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| 130<br>95<br>70—<br>53—<br>40— — RTN4IP1<br>33—<br>25—                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |          | therapeutic or diagnostic applications.                                                          |
| 130<br>95<br>70—<br>53—<br>40— — RTN4IP1<br>33—<br>25—                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |          |                                                                                                  |
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Sample:

Kidney (Mouse) Lysate at 40 ug

Primary: Anti- NIMP/RTN4IP1 (SL8334R) at 1/1000 dilution

Many Surflordbiote Ch. CC

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 39 kD

Observed band size: 40 kD