

## Rabbit Anti-NPL4 antibody

SL19334R

| Product Name:                 | NPL4  |
|-------------------------------|---|
| Chinese Name:                 | 核定位蛋白4抗体  |
| Alias:                        | KIAA1499; NPL4; NPL4, S. cerevisiae, homolog of; NPL4_HUMAN; nploc4; nuclear<br>protein localization 4 homolog (S. cerevisiae); Nuclear protein localization 4 homolog;<br>Nuclear protein localization protein 4 homolog; Nuclear protein localization protein 4, S.<br>cerevisiae, homolog of; Protein NPL4.                |
| Organism Species:             | Rabbit  |
| Clonality:                    | Polyclonal  |
| React Species:                | Human, Mouse, Rat, Chicken, Dog, Pig, Cow, Horse, Rabbit, Sheep,  |
| Applications:                 | ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-<br>500 (Paraffin sections need antigen repair)<br>not yet tested in other applications.  |
|                               | optimal dilutions/concentrations should be determined by the end user.  |
| Molecular weight:             | 68kDa   |
| <b>Cellular localization:</b> | The nucleuscytoplasmic  |
| Form:                         | Lyophilized or Liquid   |
| <b>Concentration:</b>         | 1mg/ml  |
| immunogen:                    | KLH conjugated synthetic peptide derived from human NPL4:271-370/608  |
| 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:                       | PubMed  |
| Product Detail:               | The NPL4 gene encodes the 608-amino acid, endoplasmic reticulum and nuclear membrane protein Npl4 that forms a complex with p97/Cdc48p and Ufd1p. This complex plays a role in IP3 receptor processing by recognizing ubiquitinated IP3 receptors in the endoplasmic reticulum and delivering them to the proteasome for      |

degradation. The Npl4 protein contains 8 potential N-myristoylation sites, 5 potential Nglycosylation sites, several phosphorylation sites, and a C-terminal zinc finger motif. This protein is 96% homologous to the rat Npl4 protein, 44% homologous to the Caenorhabditis elegans Npl4 protein, and 34% homologous to the Saccharomyces cerevisiae Npl4 protein. Mutations in the NPL4 gene cause defects in nuclear envelope morphology, nuclear protein import, and nuclear poly(A) RNA export.

## Function:

The ternary complex containing UFD1L, VCP and NPLOC4 binds ubiquitinated proteins and is necessary for the export of misfolded proteins from the ER to the cytoplasm, where they are degraded by the proteasome. The NPLOC4-UFD1L-VCP complex regulates spindle disassembly at the end of mitosis and is necessary for the formation of a closed nuclear envelope.

## Subcellular Location:

Cytoplasm; cytosol. Endoplasmic reticulum. Nucleus. Associated with the endoplasmic reticulum and nuclear.

**Tissue Specificity:** Expressed at highest levels in brain, heart, skeletal muscle, kidney and fetal liver.

Similarity: Belongs to the NPL4 family. Contains 1 RanBP2-type zinc finger.

SWISS: Q8TAT6

Gene ID: 55666

Database links:

Entrez Gene: 55666 Human

Entrez Gene: 217365 Mouse

Entrez Gene: 140639 Rat

<u>Omim: 606590</u> Human

SwissProt: Q8TAT6 Human

SwissProt: P60670 Mouse

SwissProt: Q9ES54 Rat

|          | Unigene: 464333 Human  |
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|          | <u>Unigene: 309520</u> Mouse   |
|          | Unigene: 144645 Rat  |
|          | <u>Unigene: 217306</u> Rat   |
|          |  |
|          | <b>Important Note:</b><br>This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.  |
| Picture: | Paraformaldehyde-fixed, paraffin embedded (Mouse brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (NPL4) Polyclonal Antibody, Unconjugated (SL19334R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructionsand DAB staining. |



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