

NPL4 Rabbit pAb

Catalog # AP98005

Product Information

Application	IHC-P, IHC-F, IF
Primary Accession	Q8TAT6
Other Accession	Q8TAT6
Reactivity	Rat, Mouse
Predicted	Pig, Human, Rabbit, Chicken, Dog, Horse, Sheep
Host	Rabbit
Clonality	Polyclonal
Calculated MW	68120
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human NPL4
Epitope Specificity	271-370/608
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Belongs to the NPL4 family. Contains 1 RanBP2-type zinc finger.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	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 N-glycosylation 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.

Additional Information

Gene ID	55666
Other Names	NPL4; mKIAA1499; NPL4_HUMAN; NPLOC4; Protein NPL4; KIAA1499; NPL4_MOUSE; NPL4_RAT; NPL4 homolog, ubiquitin recognition factor; nuclear protein localization 4 homolog (S. cerevisiae); NPLOC4 ubiquitin recognition factor
Dilution	IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. 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.

Protein Information

Name	NPLOC4
Synonyms	KIAA1499, NPL4
Function	The ternary complex containing UFD1, 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-UFD1-VCP complex regulates spindle disassembly at the end of mitosis and is necessary for the formation of a closed nuclear envelope (By similarity). Acts as a negative regulator of type I interferon production via the complex formed with VCP and UFD1, which binds to RIGI and recruits RNF125 to promote ubiquitination and degradation of RIGI (PubMed: 26471729).
Cellular Location	Cytoplasm, cytosol {ECO:0000250 UniProtKB:Q9ES54}. Endoplasmic reticulum {ECO:0000250 UniProtKB:Q9ES54}. Nucleus {ECO:0000250 UniProtKB:Q9ES54} Note=Associated with the endoplasmic reticulum and nuclear {ECO:0000250 UniProtKB:Q9ES54}
Tissue Location	Expressed at highest levels in brain, heart, skeletal muscle, kidney and fetal liver.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.