

NPL4 Antibody

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Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source/Isotype:	UniProt ID:	Entrez-Gene Id:
W	H M R Mk	Endogenous	68, 71	Rabbit	#Q8TAT6	55666

Product Usage Information**Application**

Western Blotting

Dilution

1:1000

Storage

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA and 50% glycerol. Store at -20°C. Do not aliquot the antibody.

Specificity/Sensitivity

NPL4 Antibody recognizes endogenous levels of total NPL4 protein.

Species predicted to react based on 100% sequence homology

Chicken, Xenopus, Bovine, Dog, Horse

Source / Purification

Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Lys322 of human NPL4 protein. Antibodies are purified by protein A and peptide affinity chromatography.

Background

Nuclear protein localization protein 4 (NPL4, NPLOC4) was originally identified as a yeast nuclear transport protein that was later recognized as a critical component of the endoplasmic reticulum-associated degradation (ERAD) pathway (1,2). Mammalian NPL4 protein has an amino-terminal ubiquitin-like domain containing a p97 binding site, and a conserved carboxy-terminal zinc finger (NZF) motif responsible for binding ubiquitinated target proteins (2,3). NPL4 binds ubiquitin fusion degradation protein 1 (UFD1) to form a heterodimer that associates with the p97 AAA-ATPase, creating a protein complex that mediates delivery of ubiquitinated ER proteins to the proteasome (4,5).

Background References

1. Corbett, A. et al. (1996) *Exp Cell Res* 229, 212-6.
2. Meyer, H.H. et al. (2002) *EMBO J* 21, 5645-52.
3. Bebeacua, C. et al. (2012) *Proc Natl Acad Sci U S A* 109, 1098-103.
4. Stolz, A. et al. (2011) *Trends Biochem Sci* 36, 515-23.
5. Meyer, H.H. et al. (2000) *EMBO J* 19, 2181-92.

Species Reactivity

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

Western Blot Buffer

IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 5% w/v BSA, 1X TBS, 0.1% Tween@ 20 at 4°C with gentle shaking, overnight.

Applications Key

W: Western Blotting

Cross-Reactivity Key

H: Human **M:** Mouse **R:** Rat **Mk:** Monkey

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