489 Store at -200

NPL4 Antibody



Orders: 877-616-CELL (2355)

orders@cellsignal.com

877-678-TECH (8324) Support:

Web: info@cellsignal.com

cellsignal.com

3 Trask Lane | Danvers | Massachusetts | 01923 | USA

Applications: WB	Reactivity: H M R Mk	Sensitivity: Endogenous	MW (kDa): 68, 71	Source: Rabbit	UniProt ID: #Q8TAT6	Entrez-Gene Id 55666
Product Usage Information	Application			Dilution		
	We	Western Blotting			1:1000	
Storage	Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 μ 20°C. Do not aliquot the antibody.				00 μg/ml BSA and 50% ç	glycerol. Store at –
Specificity / Sens	itivity NPL	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).

1. Corbett, A. et al. (1996) Exp Cell Res 229, 212-6. **Background References**

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).

IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 5% w/v BSA, 1X TBS, **Western Blot Buffer**

0.1% Tween® 20 at 4°C with gentle shaking, overnight.

WB: Western Blotting **Applications Key**

H: human M: mouse R: rat Hm: hamster Mk: monkey Vir: virus Mi: mink C: chicken Dm: D. melanogaster **Cross-Reactivity Key**

X: Xenopus Z: zebrafish B: bovine Dg: dog Pg: pig Sc: S. cerevisiae Ce: C. elegans Hr: horse

GP: Guinea Pig Rab: rabbit All: all species expected

Trademarks and **Patents**

Cell Signaling Technology is a trademark of Cell Signaling Technology, Inc.

All other trademarks are the property of their respective owners. Visit cellsignal.com/trademarks for more

information.

Limited Uses Except as otherwise expressly agreed in a writing signed by a legally authorized representative of CST, the

following terms apply to Products provided by CST, its affiliates or its distributors. Any Customer's terms and conditions that are in addition to, or different from, those contained herein, unless separately accepted in

writing by a legally authorized representative of CST, are rejected and are of no force or effect.

NPL4 Antibody (#13489) Datasheet Without Images Cell Signaling Technology

Products are labeled with For Research Use Only or a similar labeling statement and have not been approved, cleared, or licensed by the FDA or other regulatory foreign or domestic entity, for any purpose. Customer shall not use any Product for any diagnostic or therapeutic purpose, or otherwise in any manner that conflicts with its labeling statement. Products sold or licensed by CST are provided for Customer as the end-user and solely for research and development uses. Any use of Product for diagnostic, prophylactic or therapeutic purposes, or any purchase of Product for resale (alone or as a component) or other commercial purpose, requires a separate license from CST. Customer shall (a) not sell, license, loan, donate or otherwise transfer or make available any Product to any third party, whether alone or in combination with other materials, or use the Products to manufacture any commercial products, (b) not copy, modify, reverse engineer, decompile, disassemble or otherwise attempt to discover the underlying structure or technology of the Products, or use the Products for the purpose of developing any products or services that would compete with CST products or services, (c) not alter or remove from the Products any trademarks, trade names, logos, patent or copyright notices or markings, (d) use the Products solely in accordance with CST Product Terms of Sale and any applicable documentation, and (e) comply with any license, terms of service or similar agreement with respect to any third party products or services used by Customer in connection with the Products.