

	<h1>VCP Rabbit pAb</h1>	E 2 5 1 3 3 6 8
--	-------------------------	--------------------------------------

<b>Swiss-Prot No.:</b>	P55072
<b>Altername:</b>	VCP
<b>Storage/Stability:</b>	Store at -20°C. Avoid freeze / thaw cycles.
<b>Immunogen:</b>	Recombinant fusion protein containing a sequence corresponding to amino acids 647-806 of human VCP (NP_009057.1).
<b>Purification:</b>	Affinity purified
<b>Reactivity:</b>	Human,Mouse,Rat
<b>Other Names:</b>	p97; TERA; CDC48
<b>Cellular localization:</b>	Cytoplasm, Endoplasmic reticulum, Nucleus
	Necessary for the fragmentation of Golgi stacks during mitosis and for their reassembly after mitosis. Involved in the formation of the transitional endoplasmic reticulum (tER). The transfer of membranes from the endoplasmic reticulum to the Golgi apparatus occurs via 50-70 nm transition vesicles which derive from part-rough, part-smooth transitional elements of the endoplasmic reticulum (tER). Vesicle budding from the tER is an ATP-dependent process. 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.

**For Research Use Only**

**Relevance:**

The NPLOC4-UFD1-VCP complex regulates spindle disassembly at the end of mitosis and is necessary for the formation of a closed nuclear envelope. Regulates E3 ubiquitin-protein ligase activity of RNF19A. Component of the VCP/p97-AMFR/gp78 complex that participates in the final step of the sterol-mediated ubiquitination and endoplasmic reticulum-associated degradation (ERAD) of HMGCR. Involved in endoplasmic reticulum stress-induced pre-emptive quality control, a mechanism that selectively attenuates the translocation of newly synthesized proteins into the endoplasmic reticulum and reroutes them to the cytosol for proteasomal degradation (PubMed:26565908). Also involved in DNA damage response: recruited to double-strand breaks (DSBs) sites in a RNF8- and RNF168-dependent manner and promotes the recruitment of TP53BP1 at DNA damage sites (PubMed:22020440, PubMed:22120668). Recruited to stalled replication forks by SPRTN: may act by mediating extraction of DNA polymerase eta (POLH) to prevent excessive translesion DNA synthesis and limit the incidence of mutations induced by DNA damage (PubMed:23042607, PubMed:23042605). Required for cytoplasmic retrotranslocation of stressed/damaged mitochondrial outer-membrane proteins and their subsequent proteasomal degradation (PubMed:16186510, PubMed:21118995). Essential for the maturation of ubiquitin-containing autophagosomes and the clearance of ubiquitinated protein by autophagy (PubMed:20104022, PubMed:27753622). Acts as a negative regulator of type I interferon production by interacting with DDX58/RIG-I: interaction takes place when DDX58/RIG-I is ubiquitinated via 'Lys-63'-linked ubiquitin on its CARD domains, leading to recruit RNF125 and promote ubiquitination and degradation of DDX58/RIG-I (PubMed:26471729). May play a role in the ubiquitin-dependent sorting of membrane proteins to lysosomes where they undergo degradation

---

	(PubMed:21822278). May more particularly play a role in caveolins sorting in cells (PubMed:21822278, PubMed:23335559).
<b>Source:</b>	Rabbit
<b>Antibody type:</b>	Polyclonal antibody
<b>Isotype:</b>	Rabbit IgG
<b>Molecular Weight:</b>	115kDa
<b>Preservative:</b>	PBS with 0.02% sodium azide, 50% glycerol, pH7.3.
<b>Recommended Dilutions:</b>	WB 1:500 - 1:2000; IHC 1:50 - 1:200 (Optimal dilutions should be determined by the end user)