

# TP53RK Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP17010b

# **Product Information**

Application	WB, E
Primary Accession	<u>Q96544</u>
Other Accession	<u>Q99PW4</u> , <u>NP_291028.3</u>
Reactivity	Human
Predicted	Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB36762
Calculated MW	28160
Antigen Region	221-250

#### **Additional Information**

Gene ID	112858
Other Names	TP53-regulating kinase, Atypical serine/threonine protein kinase TP53RK, EKC/KEOPS complex subunit TP53RK, 36, Nori-2, p53-related protein kinase, TP53RK, C20orf64, PRPK
Target/Specificity	This TP53RK antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 221-250 amino acids from the C-terminal region of human TP53RK.
Dilution	WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	TP53RK Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

### **Protein Information**

Name	TP53RK ( <u>HGNC:16197</u> )
Function	Component of the EKC/KEOPS complex that is required for the formation of

	a threonylcarbamoyl group on adenosine at position 37 (t(6)A37) in tRNAs that read codons beginning with adenine (PubMed: <u>22912744</u> , PubMed: <u>27903914</u> ). The complex is probably involved in the transfer of the threonylcarbamoyl moiety of threonylcarbamoyl-AMP (TC-AMP) to the N6 group of A37 (PubMed: <u>22912744</u> , PubMed: <u>27903914</u> ). TP53RK has ATPase activity in the context of the EKC/KEOPS complex and likely plays a supporting role to the catalytic subunit OSGEP (By similarity). Atypical protein kinase that phosphorylates 'Ser-15' of p53/TP53 protein and may therefore participate in its activation (PubMed: <u>11546806</u> ).
Cellular Location	Cytoplasm. Nucleus
Tissue Location	Highly expressed in testis. Weakly expressed in heart kidney and spleen.

# Background

Protein kinase that phosphorylates 'Ser-15' of p53/TP53 protein and may therefore participate in its activation.

#### References

Shimada, M., et al. Hum. Genet. 128(4):433-441(2010) Facchin, S., et al. Cell. Mol. Life Sci. 64 (19-20), 2680-2689 (2007) : Abe, Y., et al. Biochem. Biophys. Res. Commun. 344(1):377-385(2006) Facchin, S., et al. FEBS Lett. 549 (1-3), 63-66 (2003) : Miyoshi, A., et al. Biochem. Biophys. Res. Commun. 303(2):399-405(2003)

#### Images



All lanes : Anti-TP53RK Antibody (C-term) at 1:1000 dilution Lane 1: Jurkat whole cell lysate Lane 2: K562 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 28 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



TP53RK Antibody (C-term) (Cat. #AP17010b) western blot analysis in HL-60 cell line lysates (35ug/lane).This demonstrates the TP53RK antibody detected the TP53RK protein (arrow). • Defects in tA tRNA modification due to GON7 and YRDC mutations lead to Galloway-Mowat syndrome.

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