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RNF105 Rabbit pAb

Catalog # AP97324

Product Information

Application	IHC-P, IHC-F, IF
Primary Accession	P53804
Other Accession	P53804
Reactivity	Rat, Mouse
Predicted	Human
Host	Rabbit
Clonality	Polyclonal
Calculated MW	229869
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human RNF105
Epitope Specificity	251-350/2025
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Contains 1 RING-type zinc finger. Contains 4 TPR repeats.
SUBUNIT	Interacts (when phosphorylated on Ser-378) with AKT1, AKT2 and AKT3 (when phosphorylated). Interacts with CIT.
Post-translational modifications	Phosphorylation on Ser-378 by Akt is required for ubiquitin ligase activity.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	E3 ubiquitin-protein ligase that mediates the ubiquitination and subsequent degradation of phosphorylated Akt (AKT1, AKT2 and AKT3) in the nucleus. Acts as a terminal regulator of Akt signaling after activation; its phosphorylation by Akt, which is a prerequisite for ubiquitin ligase activity, suggests the existence of a regulation mechanism required to control Akt levels after activation. Catalyzes the formation of 'Lys-48'-polyubiquitin chains. May play a role in neuronal differentiation inhibition via its interaction with CIT.

Additional Information

Gene ID	7267
Other Names	DCRR1; RNF105; TPRDIII; TTC3_HUMAN; TTC3; Protein DCRR1; RING finger protein 105; RING-type E3 ubiquitin transferase TTC3; TPR repeat protein D; Tetratricopeptide repeat protein 3 (TPR repeat protein 3); 2.3.2.27; TPRD; tetratricopeptide repeat domain 3
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	TTC3
Synonyms	DCRR1, RNF105, TPRD
Function	E3 ubiquitin-protein ligase which catalyzes the formation of 'Lys-48'-polyubiquitin chains (PubMed:20059950, PubMed:30696809). Mediates the ubiquitination and subsequent degradation of phosphorylated Akt (AKT1, AKT2 and AKT3) in the nucleus (PubMed:20059950). Acts as a terminal regulator of Akt signaling after activation; its phosphorylation by Akt, which is a prerequisite for ubiquitin ligase activity, suggests the existence of a regulation mechanism required to control Akt levels after activation (PubMed:20059950). Positively regulates TGFB1-induced epithelial-mesenchymal transition and myofibroblast differentiation by mediating the ubiquitination and subsequent degradation of SMURF2 (PubMed:30696809). Regulates neuronal differentiation by regulating actin remodeling and Golgi organization via a signaling cascade involving RHOA, CIT and ROCK (PubMed:17488780, PubMed:24695496). Inhibits cell proliferation (PubMed:30203323).
Cellular Location	Nucleus. Cytoplasm Golgi apparatus {ECO:0000250|UniProtKB:D3ZSP7}. Note=Nuclear localization may be dependent on the proteolytic cleavage of full length protein in the cytoplasm (PubMed:30203323). This cleavage may reveal an N-terminal nuclear localization signal, allowing N-terminal fragments to enter the nucleus (PubMed:30203323)
Tissue Location	Found in all tissues examined.

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