

Rabbit Anti-GNL3L antibody

SL13472R

Product Name:	GNL3L
Chinese Name:	鸟嘌 呤核苷酸 Binding protein3样 蛋白抗体
Alias:	GNL3L_HUMAN; FLJ10613; Guanine nucleotide binding protein-like 3 (nucleolar)-
	like; novel GTPase; OTTHUMP0000023374.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat, Dog, Pig, Cow, Horse, Rabbit,
Applications:	ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-
	500 (Paraffin sections need antigen repair)
	not yet tested in other applications.
	optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	66kDa
Cellular localization:	The nucleus
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human GNL3L:210-310/582
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized
	antibody is stable at room temperature for at least one month and for greater than a year
	when kept at -20°C. 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.
PubMed:	PubMed
Product Detail:	GTPases from the MMR1/HSR1 GTP-binding protein subfamily are circularly
	rearranged G-motifs that play a critical role in maintaining normal cell growth. Deletion
	of these genes results in severe growth defects with a marked reduction in mature rRNA
	species and a concomitant accumulation of the 35S pre-rRNA transcript. Deletion also
	causes the ribosomal protein Rpl25a to fail exportation from the nucleolus. Deletion of
	any of the G-domain motifs will result in a null phenotype and nuclear/nucleolar

localization that lacks the nucleolar export of preribosomes and is accompanied by a distortion of the nucleolar structure. GNL3L (guanine nucleotide binding protein-like 3) (nucleolar)-like) is a 582 amino acid nuclear protein that belongs to the MMR1/HSR1 GTP-binding protein family. Containing one G (guanine nucleotide-binding) domain, GNL3L is required for normal processing of ribosomal pre-rRNA and for cell proliferation.

Function:

Stabilizes TERF1 telomeric association by preventing TERF1 recruitment by PML. Stabilizes TERF1 protein by preventing its ubiquitination and hence proteasomal degradation. Does so by interfering with TERF1-binding to FBXO4 E3 ubiquitinprotein ligase. Required for cell proliferation. By stabilizing TRF1 protein during mitosis, promotes metaphase-to-anaphase transition. Stabilizes MDM2 protein by preventing its ubiquitination, and hence proteasomal degradation. By acting on MDM2, may affect TP53 activity. Required for normal processing of ribosomal pre-rRNA. Binds GTP.

Subunit:

Interacts with MDM2; this interaction, which occurs in the nucleoplasm, stabilizes MDM2. Indirectly interacts with TP53, via MDM2-binding. Interacts with TERF1; this interaction probably occurs in the nucleoplasm and is increased during mitosis, when the nucleolus is disassembled. This binding may promote TERF1 homodimerization. Interacts with TERT.

Subcellular Location: Nucleus, nucleolus.

Similarity:

Belongs to the MMR1/HSR1 GTP-binding protein family. Contains 1 G (guanine nucleotide-binding) domain.

SWISS:

Q9NVN8

Gene ID: 54552

Database links:

Entrez Gene: 54552Human

SwissProt: Q9NVN8Human

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

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