

ELL3 Rabbit pAb

Catalog # AP98196

Product Information

Application	IHC-P, IHC-F, IF, E
Primary Accession	Q9HB65
Other Accession	Q9HB65
Predicted	Rat, Pig, Human, Mouse, Rabbit, Chicken, Dog, Sheep
Host	Rabbit
Clonality	Polyclonal
Calculated MW	45361
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human ELL3
Epitope Specificity	51-158/158
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Belongs to the BTG family.
SUBUNIT	Interacts with PRKCABP. Binds the CCR4-NOT complex. Interacts with PIN1, inducing mitochondrial depolarization.
Post-translational modifications	Phosphorylated at Ser-147 by MAPK1/ERK2 and MAPK3/ERK1, and at Ser-149 by MAPK14, leading to PIN1-binding and mitochondrial depolarization.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	Eukaryotic RNA polymerase II mediates the synthesis of mature and functional messenger RNA. This is a multistep process, called the transcription cycle, that includes five stages: preinitiation, promoter, clearance, elongation and termination. Elongation is thought to be a critical stage for the regulation of gene expression. ELL (11-19 lysine-rich leukemia protein), also designated MEN, functions as an RNA polymerase II elongation factor that increases the rate of transcription by suppressing transient pausing by RNA polymerase II. It is also thought to regulate cellular proliferation. ELL is abundantly expressed in peripheral blood leukocytes, skeletal muscle, placenta and testis, with lower expression in spleen, thymus, heart, brain, lung, kidney, liver and ovary. ELL3 is a 397 amino acid nuclear protein that functions as an RNA polymerase II elongation factor that increases the rate of transcription by suppressing transient pausing by RNA polymerase II. Though similar to ELL and ELL2, ELL3 is exclusively expressed in testis.

Additional Information

Gene ID	80237
Other Names	A930015D22Rik; ELL3_HUMAN; ELL3; ELL3_MOUSE; ELL3_RAT; elongation factor for RNA polymerase II 3; elongation factor RNA polymerase II-like 3

Dilution	IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500,ELISA=1:5000-10000
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	ELL3
Function	Enhancer-binding elongation factor that specifically binds enhancers in embryonic stem cells (ES cells), marks them, and is required for their future activation during stem cell specification. Does not only bind to enhancer regions of active genes, but also marks the enhancers that are in a poised or inactive state in ES cells and is required for establishing proper RNA polymerase II occupancy at developmentally regulated genes in a cohesin-dependent manner. Probably required for priming developmentally regulated genes for later recruitment of the super elongation complex (SEC), for transcriptional activation during differentiation. Required for recruitment of P-TEFb within SEC during differentiation. Probably preloaded on germ cell chromatin, suggesting that it may prime gene activation by marking enhancers as early as in the germ cells. Promoting epithelial- mesenchymal transition (EMT) (By similarity). Elongation factor component of the super elongation complex (SEC), a complex required to increase the catalytic rate of RNA polymerase II transcription by suppressing transient pausing by the polymerase at multiple sites along the DNA. Component of the little elongation complex (LEC), a complex required to regulate small nuclear RNA (snRNA) gene transcription by RNA polymerase II and III (PubMed: 22195968).
Cellular Location	Nucleus.
Tissue Location	Testis specific..

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