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Rabbit Anti-LAP2 alpha antibody

SL13709R

Product Name:	LAP2 alpha
Chinese Name:	胸腺生成素LAP2抗体
Alias:	Isoforms beta/gamma; Lamina associated polypeptide 2 alpha; Lamina associated polypeptide 2; LAP2; Thymopoietin; Thymopoietin isoform alpha; TMPO; TP alpha; TP; LAP2-alpha; LAP2A_HUMAN.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Cow,
Applications:	WB=1:500-2000ELISA=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:	83kDa
Cellular localization:	The nucleus
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human LAP2:51-150/694
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:	The nuclear envelope separates the nucleoplasm from the cytoplasm in eukaryotic cells and includes the outer and inner nuclear membrane, nuclear pore complexes and the nuclear lamina. The nuclear lamina contains intermediate filament-type proteins called lamins that form a dense network to strengthen and stabilize the nuclear envelope. Lamina-associated polypeptide 2 (LAP2) is also known as thymopoietin. LAP2 is a

	nuclear envelope protein and contains an amino-terminal region called the LAP2-emerin-MAN1 or LEM motif. LAP2 also contains a unique DNA-binding amino-terminal domain. Alternative splicing produces six isoforms (α, β,γ, ε and δ) of mammalian LAP2 and three isoforms in Xenopus LAP2. LAP2α and LAP2β associate with chromosomal barrier-to-autointegration factor (BAF) and may play a role in stabilizing chromatin structure. LAP2β also binds to lamin B. LAP2α is a non-membrane isoform of LAP2 that associates with the internal nucleoskeleton and binds lamin A. The gene encoding human LAP2 maps to chromosome 12q23.1. **Function:** Lamins are type V intermediate filament proteins and are grouped into constitutively expressed B-type lamins and developmentally regulated A-type lamins. Lamin-binding proteins in the nuclear lamina and the nuclear interior include several protein families and/or types of proteins in higher eukaryotes such as the inner nuclear membrane proteins, lamin B receptor, emerin, MANI, three isoforms of lamina-associated polypeptide 1 (LAP 1), and several isoforms of LAP 2. Up to six LAP 2 isoforms derive from a single gene by alternative splicing in mammals and various isoforms have been described in Xenopus. The best characterized LAP2 isoforms are the inner nuclear membrane protein LAP 2 beta and the nucleoplasmic protein LAP 2 alpha, which are identical in their N-terminal 187-amino acid constant region but differ in their C termini. LAP 2 alpha specifically interacts with A-type lamins within the nuclear interior as part of a detergent- and salt-resistant nucleoskeletal structure. **Subunit:** Interacts with LMNA, BANF1 and RB1 and with chromosomes. Associates directly or indirectly with lamins at specific cell-cycle stages. **Subcellular Location:** Nuclear **Tissue Specificity:** Expressed in many tissues. Most abundant in adult thymus and fetal liver. **Post-translational modifications:** Phosphorylated in a mitose-specific manner. **DISEASE:** Cardiomyopathy, dilated 1T (CMD1T) [MIM:613740]: A disorder characterized by ventricular dilation and impaired systolic function, resulting in congestive heart failure and arrhythmia. Patients are at risk of premature death. Note=The disease is caused by mutations affecting the gene represented in this entry. **Similarity:** Belongs to the LEM family. Contains 1 LEM domain. Contains 1 LEM-like domain.

	SWISS: P42166 **Gene ID:** 7112 **Database links:** Entrez Gene: 7112 Human Entrez Gene: 21917 Mouse Entrez Gene: 25359 Rat Omim: 188380 Human SwissProt: P42166 Human SwissProt: Q61033 Mouse SwissProt: Q62733 Rat **Important Note:** This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.