

Thymopoietin Antibody

Catalog # ASC11407

Product Information

Application	WB, IF, ICC, E
Primary Accession	P42166
Other Accession	NP_003267 , 4507555
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	75492
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	Thymopoietin antibody can be used for detection of Thymopoietin by Western blot at 0.25 μ g/mL. Antibody can also be used for immunocytochemistry starting at 2.5 μ g/mL. For immunofluorescence start at 5 μ g/mL.

Additional Information

Gene ID	7112
Other Names	Lamina-associated polypeptide 2, isoform alpha, Thymopoietin isoform alpha, TP alpha, Thymopoietin-related peptide isoform alpha, TPRP isoform alpha, Thymopoietin, TP, Splenin, Thymopentin, TP5, TMPO, LAP2
Target/Specificity	TMPO; At least three isoforms of Thymopoietin are known to exist; this antibody will detect all isoforms. Thymopoietin antibody is predicted to not cross-react with other LEM domain-containing proteins.
Reconstitution & Storage	Thymopoietin antibody can be stored at 4°C for three months and -20°C, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.
Precautions	Thymopoietin Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	TMPO
Synonyms	LAP2
Function	May be involved in the structural organization of the nucleus and in the post-mitotic nuclear assembly. Plays an important role, together with LMNA, in the nuclear anchorage of RB1.

Cellular Location	Nucleus. Chromosome. Note=Expressed diffusely throughout the nucleus
Tissue Location	Expressed in many tissues. Most abundant in adult thymus and fetal liver

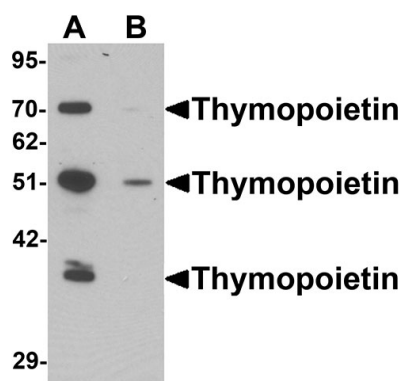
Background

Thymopoietin Antibody: Thymopoietin (TMPO), also known as LAP2, is a widely expressed leucine-domain-containing nuclear protein that is thought to play an important role in the regulation of nuclear architecture by binding lamin B1 and chromosomes in a manner regulated by phosphorylation during mitosis. Thymopoietin associates with nucleoplasmic lamins A/C, which are encoded by the dilated cardiomyopathy (DCM) gene LMNA; mutations in Thymopoietin disrupt this binding, suggesting that Thymopoietin may be a candidate disease gene for DCM.

References

Harris CA, Andryuk PJ, Cline SW, et al. Structure and mapping of the human thymopoietin (TMPO) gene and relationship of human TMPO beta to rat lamin-associated polypeptide 2. *Genomics* 1995; 28:198-205.
Taylor MR, Slavov D, Gajewski A, et al. Thymopoietin (lamina-associated polypeptide 2) gene mutation associated with dilated cardiomyopathy. *Hum. Mutat.* 2005; 26:566-

Images

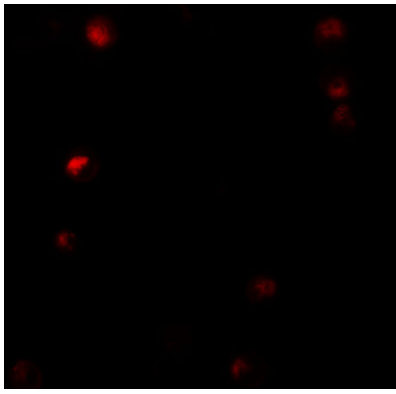


Western blot analysis of Thymopoietin in HeLa cell lysate with Thymopoietin antibody at 0.25 $\mu\text{g/mL}$ in (A) the absence and (B) the presence of blocking peptide.



Immunocytochemistry of Thymopoietin in HeLa cells with Thymopoietin antibody at 2.5 $\mu\text{g/mL}$.

Immunofluorescence of Thymopoietin in HeLa cells with Thymopoietin antibody at 5 $\mu\text{g/mL}$.



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