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THAP1 Rabbit pAb

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Catalog # AP58595

Product Information

Application	WB
Primary Accession	Q9NVV9
Reactivity	Human, Mouse, Rat
Predicted	Chicken, Dog, Rabbit, Sheep
Host	Rabbit
Clonality	Polyclonal
Calculated MW	24944
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human THAP1
Epitope Specificity	121-213/213
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Nucleus, nucleoplasm. Nucleus, PML body.
SIMILARITY	Belongs to the THAP1 family. Contains 1 THAP-type zinc finger.
SUBUNIT	Interacts with PAWR. Component of a THAP1/THAP3-HCFC1-OGT complex that contains, either THAP1 or THAP3, HCFC1 and OGT. Interacts with OGT. Interacts (via the HBM) with HCFC1 (via the Kelch-repeat domain); the interaction recruits HCFC1 to the RRM1 promoter.
DISEASE	Defects in THAP1 are the cause of dystonia type 6 (DYT6) [MIM:602629]. DYT6 is a primary torsion dystonia. Dystonia is defined by the presence of sustained involuntary muscle contractions, often leading to abnormal postures. Dystonia type 6 is characterized by onset in early adulthood, cranial or cervical involvement in about half of the cases, and frequent progression to involve multiple body regions.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	THAP1 contains a THAP domain, a zinc-dependent DNA-binding domain. It colocalizes with the apoptosis response protein PAWR/PAR-4 in promyelocytic leukemia (PML) nuclear bodies and is a pro-apoptopic protein that potentiates both serum-withdrawal and TNF-induced apoptosis. It is a physiologic regulator of endothelial cell proliferation and cell-cycle progression, two essential processes for angiogenesis.

Additional Information

Gene ID	55145
Other Names	THAP domain-containing protein 1, THAP1
Target/Specificity	Highly expressed in heart, skeletal muscle, kidney and liver. Weaker expression in brain and placenta.

Dilution	WB=1:500-2000
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.

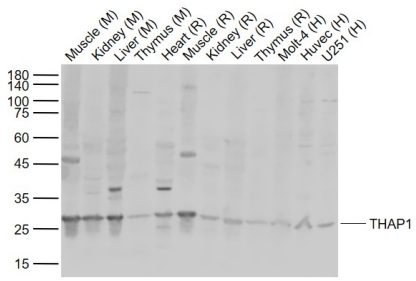
Protein Information

Name	THAP1
Function	DNA-binding transcription regulator that regulates endothelial cell proliferation and G1/S cell-cycle progression. Specifically binds the 5'-[AT]NTNN[GT]GGCA[AGT]-3' core DNA sequence and acts by modulating expression of pRB-E2F cell-cycle target genes, including RRM1. Component of a THAP1/THAP3-HCFC1-OGT complex that is required for the regulation of the transcriptional activity of RRM1. May also have pro-apoptotic activity by potentiating both serum- withdrawal and TNF-induced apoptosis.
Cellular Location	Nucleus, nucleoplasm. Nucleus, PML body
Tissue Location	Highly expressed in heart, skeletal muscle, kidney and liver. Weaker expression in brain and placenta

Background

THAP1 contains a THAP domain, a zinc-dependent DNA-binding domain. It colocalizes with the apoptosis response protein PAWR/PAR-4 in promyelocytic leukemia (PML) nuclear bodies and is a pro-apoptopic protein that potentiates both serum-withdrawal and TNF-induced apoptosis. It is a physiologic regulator of endothelial cell proliferation and cell-cycle progression, two essential processes for angiogenesis.

Images



Sample:
Lane 1: Mouse Muscle tissue lysates
Lane 2: Mouse Kidney tissue lysates
Lane 3: Mouse Liver tissue lysates
Lane 4: Mouse Thymus tissue lysates
Lane 5: Rat Heart tissue lysates
Lane 6: Rat Muscle tissue lysates
Lane 7: Rat Kidney tissue lysates
Lane 8: Rat Liver tissue lysates
Lane 9: Rat Thymus tissue lysates
Lane 10: Human Molt-4 cell lysates
Lane 11: Human Huvec cell lysates
Lane 12: Human U251 cell lysates
Primary: Anti-THAP1 (AP58595) at 1/1000 dilution
Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution
Predicted band size: 25 kD
Observed band size: 27 kD