10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

# THAP11 Antibody

Catalog # ASC11738

## Product Information

| | |
|---|---|
| **Application** | WB, E |
| **Primary Accession** | Q96EK4 |
| **Other Accession** | NP_065190, 40354197 |
| **Reactivity** | Human, Mouse, Rat |
| **Host** | Rabbit |
| **Clonality** | Polyclonal |
| **Isotype** | IgG |
| **Calculated MW** | 34455 |
| **Concentration (mg/ml)** | 1 mg/mL |
| **Conjugate** | Unconjugated |
| **Application Notes** | THAP11 antibody can be used for detection of THAP11 by Western blot at 1 - 2 g/ml. |

## Additional Information

| | |
|---|---|
| **Gene ID** | 57215 |
| **Other Names** | THAP domain-containing protein 11, THAP11 |
| **Target/Specificity** | THAP11; THAP11 antibody is human, mouse and rat reactive. |
| **Reconstitution & Storage** | THAP11 antibody can be stored at 4℃ for three months and -20℃, stable for up to one year. |
| **Precautions** | THAP11 Antibody is for research use only and not for use in diagnostic or therapeutic procedures. |

## Protein Information

| | |
|---|---|
| **Name** | THAP11 |
| **Function** | Transcription factor, which has both transcriptional activation and repression activities (PubMed:31905202). Also modulates chromatin accessibility (PubMed:38361031). In complex with HCFC1 and ZNF143, regulates the expression of several genes, including AP2S1, ESCO2, OPHN1, RBL1, UBXN8 and ZNF32 (PubMed:26416877). May regulate the expression of genes that encode both cytoplasmic and mitochondrial ribosomal proteins (By similarity). Required for normal mitochondrial development and function. Regulates mitochondrial gene expression, including that of components of the electron transport chain (By similarity). Involved in the maintainance of pluripotency in early embryonic cells, possibly through its action on mitochondrial maturation which is required to meet high energy demands of these cells (By similarity). Required for early development of retina, preventing premature exit of retinal progenitor cells from the cell cycle. This |

| | |
|---|---|
| | effect may also be mediated by its action on mitochondria (By similarity). Through the regulation of MMACHC gene expression, controls cobalamin metabolism (PubMed:28449119, PubMed:31905202). Required for normal brain development and neural precursor differentiation (By similarity). Involved in cell growth (PubMed:31905202). |
| **Cellular Location** | Nucleus. Cytoplasm Note=In oocytes, detected in the ooplasm, without evidence of its presence in the nucleus (By similarity). Found in the nucleus of undifferentiated embryonic stem cells (PubMed:18585351). Evenly distributed between nucleus and cytoplasm in skin fibroblasts (PubMed:37148549). {ECO:0000250\|UniProtKB:Q9JJD0, ECO:0000269\|PubMed:18585351, ECO:0000269\|PubMed:37148549} |
| **Tissue Location** | Expressed in skin fibroblasts. |

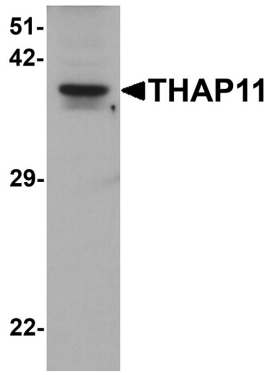
## Background

The THAP domain-contining protein 11 (THAP11), also known as Ronin, is an essential factor involved in embryonic stem (ES) cell pluripotency and cell growth (1). THAP 11 contains a THAP domain, a conserved DNA-binding domain common to many proteins associated with chromatin modification and gene expression silencing, and has striking similarity to the site-specific DNA-binding domain (DBD) of Drosophila P element transposases (2). THAP11 can also negatively regulate CD44 v6 expression through its interaction with the poly(rC) binding protein PCBP1 (3).

## References


Dejosez M, Krumenacker JS, Zitur LJ, et al. Ronin is essential for embryogenesis and the pluripotency of mouse ES cells. Cell 2008; 133:1162-74.
Roussigne M, Kossida S, Lavigne AC, et al. The THAP domain: a novel protein motif with similarity to the DNA-binding domain of P element transposase. Trends Biochem. Sci. 2003; 28:66-9.
Lian WX, Yin RH, Kong XZ, et al. THAP11, a novel binding protein of PCBP1, negatively regulates CD44 alternative splicing and cell invasion in a human hepatoma cell line. FEBS Lett. 2012; 586:1431-8.


## Images




Western blot analysis of THAP11 in human brain tissue lysate with THAP11 antibody at 1 µg/ml.


Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.