

CITED2 Antibody

Catalog # ASC11561

Product Information

Application	WB, IF, E
Primary Accession	Q99967
Other Accession	NP_001161861 , 270288756
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	28497
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	CITED2 antibody can be used for detection of CITED2 by Western blot at 1 - 2 μ g/mL. For immunofluorescence start at 20 μ g/mL.

Additional Information

Gene ID	10370
Other Names	Cbp/p300-interacting transactivator 2, MSG-related protein 1, MRG-1, P35srj, CITED2, MRG1
Target/Specificity	CITED2; Multiple isoforms of CITED2 are known to exist.
Reconstitution & Storage	CITED2 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	CITED2 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	CITED2
Synonyms	MRG1
Function	Transcriptional coactivator of the p300/CBP-mediated transcription complex. Acts as a bridge, linking TFAP2 transcription factors and the p300/CBP transcriptional coactivator complex in order to stimulate TFAP2-mediated transcriptional activation. Positively regulates TGF-beta signaling through its association with the SMAD/p300/CBP-mediated transcriptional coactivator complex. Stimulates the peroxisome proliferator-activated receptors PPAR α transcriptional activity. Enhances estrogen-dependent transactivation mediated by estrogen receptors. Also acts as a transcriptional corepressor;

interferes with the binding of the transcription factors HIF1A or STAT2 and the p300/CBP transcriptional coactivator complex. Participates in sex determination and early gonad development by stimulating transcription activation of SRY. Plays a role in controlling left-right patterning during embryogenesis; potentiates transcriptional activation of NODAL-mediated gene transcription in the left lateral plate mesoderm (LPM). Plays an essential role in differentiation of the adrenal cortex from the adrenogonadal primordium (AGP); stimulates WT1-mediated transcription activation thereby up-regulating the nuclear hormone receptor NR5A1 promoter activity. Associates with chromatin to the PITX2 P1 promoter region.

Cellular Location

Nucleus Note=Colocalizes with EP300 in dot-like structures

Background

CITED2 Antibody: CITED2 was initially identified as a potential transcriptional activator with significant homology to MSG1, a melanocyte-specific nuclear protein. CITED2 interacts with the histone acetyltransferase p300/CBP and acts as a coactivator to several DNA-binding transcription factors such as HIF-1 and AP-2. CITED2 also controls proliferation of mouse embryonic fibroblasts via the polycomb group genes Bmi-1 and Mel18 and the tumor suppressor Ink4a/Arf. CITED2 has also been found to be an essential regulator of adult hematopoietic stem cells (HSCs), with conditional deletion of CITED2 in the adult mouse resulting in the loss of HSCs, multilineage bone marrow failure and increased lethality.

References

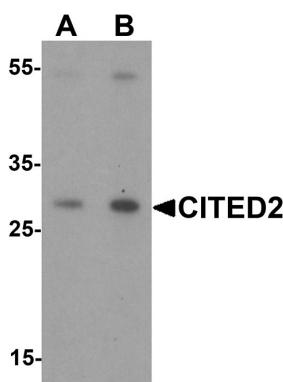
Shioda T, Fenner MH, and Isselbacher KJ. MSG1 and its related protein MRG1 share a transcription activating domain. *Gene* 1997; 204:235-41.

Bhattachatya S, Michels CL, Leung MK, et al. Functional role of p35srj, a novel p300/CBP binding protein, during transactivation by HIF-1. *Genes Dev.* 1999; 13:64-75.

Bamforth SD, Braganca J, Eloranta JJ, et al. Cardiac malformations, adrenal agenesis, neural crest defects and exencephaly in mice lacking Cited2, a new Tfac2 co-activator. *Nat. Genet.* 2001; 29:469-74.

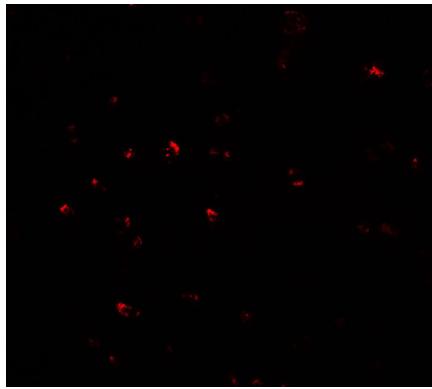
Kranc KR, Bamforth SD, Braganca J, et al. Transcriptional coactivator Cited2 induces Bmi1 and Mel18 and controls fibroblast proliferation via Ink4a/ARF. *Mol. Cell. Biol.* 2003; 23:7658-66.

Images



Western blot analysis of CITED2 in Jurkat cell lysate with CITED2 antibody at (A) 1 and (B) 2 μ g/mL.

Immunofluorescence of CITED2 in Jurkat cells with CITED2 antibody at 20 μ g/mL.



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