

CITED2 Antibody (NT) Rabbit Polyclonal Antibody Catalog # ABV10889

Specification

CITED2 Antibody (NT) - Product Information

Application Primary Accession Reactivity Host Clonality Isotype Calculated MW WB <u>Q99967</u> Human, Mouse Rabbit Polyclonal Rabbit IgG1 28497

CITED2 Antibody (NT) - Additional Information

Gene ID 10370

Positive Control Application & Usage Western Blot: Jurkat cell lysate Western Blot: 1 - 2 μ g/ml, ELISA. However, the optimal conditions should be determined individually.

Other Names

Cbp/p300-interacting transactivator 2, melanocyte-specific gene 1-related gene 1, MSG-related protein 1, MRG1, melanocyte specific gene 2, MSG2, ER154-like, ASD8, VSD2

Target/Specificity CITED2

Antibody Form Liquid

Appearance Colorless liquid

Formulation 100 μ g (1 mg/ml) in 1X PBS containing 0.02 % sodium azide.

Handling The antibody solution should be gently mixed before use.

Reconstitution & Storage -20 °C

Background Descriptions

Precautions

CITED2 Antibody (NT) is for research use only and not for use in diagnostic or therapeutic procedures.



CITED2 Antibody (NT) - 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 PPARA transcriptional activity. Enhances estrogen-dependent transactivation mediated by estrogen receptors. Acts also 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

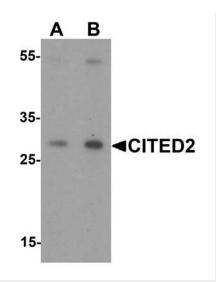
CITED2 Antibody (NT) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

CITED2 Antibody (NT) - Images





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

CITED2 Antibody (NT) - Background

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.