

## MEIS2 Antibody (Center D269)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP5518c

#### Specification

## **MEIS2 Antibody (Center D269) - Product Information**

Application Primary Accession Other Accession Reactivity Predicted Host Clonality Isotype Calculated MW Antigen Region WB, FC, IHC-P,E <u>O14770</u> <u>P97367</u>, <u>NP\_733775</u> Human Mouse Rabbit Polyclonal Rabbit IgG 51790 254-280

### MEIS2 Antibody (Center D269) - Additional Information

Gene ID 4212

Other Names Homeobox protein Meis2, Meis1-related protein 1, MEIS2, MRG1

Target/Specificity

This MEIS2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 254-280 amino acids from the Central region of human MEIS2.

Dilution WB~~1:2000 FC~~1:10~50 IHC-P~~1:50~100 E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

#### Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

MEIS2 Antibody (Center D269) is for research use only and not for use in diagnostic or therapeutic procedures.

### MEIS2 Antibody (Center D269) - Protein Information



### Name MEIS2

## Synonyms MRG1

**Function** Involved in transcriptional regulation. Binds to HOX or PBX proteins to form dimers, or to a DNA-bound dimer of PBX and HOX proteins and thought to have a role in stabilization of the homeoprotein-DNA complex. Isoform 3 is required for the activity of a PDX1:PBX1b:MEIS2b complex in pancreatic acinar cells involved in the transcriptional activation of the ELA1 enhancer; the complex binds to the enhancer B element and cooperates with the transcription factor 1 complex (PTF1) bound to the enhancer A element; MEIS2 is not involved in complex DNA-binding. Probably in complex with PBX1, is involved in transcriptional regulation by KLF4. Isoform 3 and isoform 4 can bind to a EPHA8 promoter sequence containing the DNA motif 5'-CGGTCA-3'; in cooperation with a PBX protein (such as PBX2) is proposed to be involved in the transcriptional activation of EPHA8 in the developing midbrain. May be involved in regulation of myeloid differentiation. Can bind to the DNA sequence 5'-TGACAG-3'in the activator ACT sequence of the D(1A) dopamine receptor (DRD1) promoter and activate DRD1 transcription; isoform 5 cannot activate DRD1 transcription.

Cellular Location Nucleus {ECO:0000255|PROSITE-ProRule:PRU00108}. Cytoplasm, perinuclear region {ECO:0000250|UniProtKB:P97367}

**Tissue Location** 

Expressed in various tissues. Expressed at high level in the lymphoid organs of hematopoietic tissues. Also expressed in some regions of the brain, such as the putamen

## MEIS2 Antibody (Center D269) - 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>

MEIS2 Antibody (Center D269) - Images





Anti-MEIS2 Antibody (Center D269) at 1:2000 dilution + K562 whole cell lysate Lysates/proteins at 20  $\mu$ g per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 52 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



MEIS2 Antibody (Center D269) (Cat. #AP5518c) immunohistochemistry analysis in formalin fixed and paraffin embedded human brain tissue followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of the MEIS2 Antibody (Center D269) for immunohistochemistry. Clinical relevance has not been evaluated.



MEIS2 Antibody (Center D269) (Cat. #AP5518c) flow cytometric analysis of WiDr cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit



secondary antibodies were used for the analysis.

# MEIS2 Antibody (Center D269) - Background

MEIS2 is a homeobox protein belonging to the TALE ('three amino acid loop extension') family of homeodomain-containing proteins. TALE homeobox proteins are highly conserved transcription regulators, and several members have been shown to be essential contributors to developmental programs.

### MEIS2 Antibody (Center D269) - References

Adkins, D.E., et al. Mol. Psychiatry (2010) Milech, N., et al. Leuk. Res. 34(3):358-363(2010) Vasan, R.S., et al. JAMA 302(2):168-178(2009) Steelman, S., et al. Genome Res. 7(2):142-156(1997)