

MEIS2 Antibody (internal region)

Peptide-affinity purified goat antibody Catalog # AF3212a

## Specification

# MEIS2 Antibody (internal region) - Product Information

Application Primary Accession Other Accession Reactivity Predicted Host Clonality Concentration Isotype Calculated MW WB, E <u>O14770</u> <u>NP\_733777.1</u>, <u>NP\_733775.1</u>, <u>NP\_758526.1</u>, <u>4212</u> Mouse, Rat Human, Dog Goat Polyclonal 0.5 mg/ml IgG 51790

## MEIS2 Antibody (internal region) - Additional Information

Gene ID 4212

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

Dilution WB~~1:1000 E~~N/A

**Format** 0.5 mg/ml in Tris saline, 0.02% sodium azide, pH7.3 with 0.5% bovine serum albumin

**Storage** Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions** MEIS2 Antibody (internal region) is for research use only and not for use in diagnostic or therapeutic procedures.

### MEIS2 Antibody (internal region) - 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 (internal region) - 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 (internal region) - Images



AF3212a (0.1 µg/ml) staining of Mouse Brain (lane A), Rat Brain (lane B), Mouse Thymus (lane C)



and Rat Thymus (lane D) lysates (35  $\mu$ g protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.

### MEIS2 Antibody (internal region) - Background

This antibody is expected to recognize reported Human isoforms a (NP\_733777.1), c (NP\_733775.1), and g (NP\_758526.1), and reported Mouse isoforms 3, 4 and 5 (NP\_001153039.1, NP\_001153040.1, NP\_001153041.1). NB: The immunizing peptide shows no overlap with

### MEIS2 Antibody (internal region) - References

Conserved regulation of proximodistal limb axis development by Meis1/Hth. Mercader N, Leonardo E, Azpiazu N, Serrano A, Morata G, MartÃnez C, Torres M, Nature 1999 Nov 402 (6760): 425-9. PMID: 10586884