

# MNDA Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP11243a

# **Product Information**

Application Primary Accession	WB, IHC-P, FC, E <u>P41218</u>
Other Accession	NP_002423.1
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB23169
Calculated MW	45836
Antigen Region	26-53

## **Additional Information**

Gene ID	4332
Other Names	Myeloid cell nuclear differentiation antigen, MNDA
Target/Specificity	This MNDA antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 26-53 amino acids from the N-terminal region of human MNDA.
Dilution	WB~~1:1000 IHC-P~~1:100~500 FC~~1:10~50 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	MNDA Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

#### **Protein Information**

Name	MNDA
Function	May act as a transcriptional activator/repressor in the myeloid lineage. Plays a role in the granulocyte/monocyte cell-specific response to interferon. Stimulates the DNA binding of the transcriptional repressor protein YY1.

Cellular Location	Nucleus. Cytoplasm. Note=Uniformly distributed throughout the interphase cell nucleus. Associates with chromatin
Tissue Location	Expressed constitutively in cells of the myeloid lineage. Found in promyelocyte stage cells as well as in all other stage cells including peripheral blood monocytes and granulocytes. Also appears in myeloblast cells in some cases of acute myeloid Leukemia

# Background

The myeloid cell nuclear differentiation antigen (MNDA) is detected only in nuclei of cells of the granulocyte-monocyte lineage. A 200-amino acid region of human MNDA is strikingly similar to a region in the proteins encoded by a family of interferon-inducible mouse genes, designated Ifi-201, Ifi-202, and Ifi-203, that are not regulated in a cell- or tissue-specific fashion. The 1.8-kb MNDA mRNA, which contains an interferon-stimulated response element in the 5-prime untranslated region, was significantly upregulated in human monocytes exposed to interferon alpha. MNDA is located within 2,200 kb of FCER1A, APCS, CRP, and SPTA1. In its pattern of expression and/or regulation, MNDA resembles IFI16, suggesting that these genes participate in blood cell-specific responses to interferons.

# References

Kimkong, I., et al. J. Rheumatol. 37(7):1544-1547(2010) Kanellis, G., et al. Leukemia 23(10):1847-1857(2009) Joshi, A.D., et al. Clin. Cancer Res. 13 (18 PT 1), 5295-5304 (2007) : Briggs, R.C., et al. Cancer Res. 66(9):4645-4651(2006) Asefa, B., et al. FEBS Lett. 580(5):1205-1214(2006)

## Images



Western blot analysis of MNDA Antibody (N-term) Pab (Cat. #AP11243a) pre-incubated without(lane 1) and with(lane 2) blocking peptide in CEM cell line lysate. MNDA Antibody (N-term) (arrow) was detected using the purified Pab.



MNDA Antibody (N-term) (Cat.

#AP11243a)immunohistochemistry analysis in formalin fixed and paraffin embedded human placenta tissue followed by peroxidase conjugation of the secondary antibody and DAB staining.This data demonstrates the use of MNDA Antibody (N-term) for immunohistochemistry. Clinical relevance has not been evaluated.



cytometric analysis of CEM cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

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