

## **MDFIC Polyclonal Antibody**

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP58431

# **Specification**

## **MDFIC Polyclonal Antibody - Product Information**

Application WB, IHC-P, IHC-F, IF, E

Primary Accession <u>Q9P1T7</u>

Reactivity
Host
Clonality
Calculated MW
Rat, Pig, Dog, Bovine
Rabbit
Polyclonal
26 KDa

Calculated MW 26 KDa
Physical State Liquid

Immunogen KLH conjugated synthetic peptide derived

laG

from human MDFIC

Epitope Specificity 121-220/246

Isotype
Purity
affinity purified by Protein A

Buffer 0.01M TBS (pH7.4) with 1% BSA, 0.02%

Proclin300 and 50% Glycerol.

SUBCELLULAR LOCATION Isoform 1: Nucleus, nucleolus. Note=Also

shows a granular distribution in the cytoplasm. Isoform 2: Cytoplasm. Note=Weak expression in the nucleus.

SIMILARITY Belongs to the MDFI family.

SUBUNIT Interacts with HAND1; leading to

sequester HAND1 into the nucleolus and prevent its activity. Interacts with ZIC2 (By similarity). The C-terminus interacts with

HIV-1 Tat and Rev, AXIN1, the

histidine-rich region of CCNT1/cyclin-T and

weakly with LEF1.

Important Note

This product as supplied is intended for research use only, not for use in human.

therapeutic or diagnostic applications.

#### **Background Descriptions**

This gene product is a member of a family of proteins characterized by a specific cysteine-rich C-terminal domain, which is involved in transcriptional regulation of viral genome expression. Alternative translation initiation from an upstream non-AUG (GUG), and an in-frame, downstream AUG codon, results in the production of two isoforms, p40 and p32, respectively, which have different subcellular localization; p32 is mainly found in the cytoplasm, whereas p40 is targeted to the nucleolus. Both isoforms have transcriptional regulatory activity that is attributable to the cysteine-rich C-terminal domain. Alternative splicing results in multiple transcript variants.

# **MDFIC Polyclonal Antibody - Additional Information**

**Gene ID 29969** 



#### **Other Names**

MyoD family inhibitor domain-containing protein, I-mfa domain-containing protein, hIC, MDFIC (<a href="http://www.genenames.org/cgi-bin/gene\_symbol\_report?hgnc\_id=28870" target=" blank">HGNC:28870</a>)

#### **Target/Specificity**

Expressed in lymphoid organs (spleen, thymus, peripheral blood leukocytes) as well as prostate, uterus and small intestine.

#### **Dilution**

```
<span class ="dilution_WB">WB~~1:1000</span><br \><span class
="dilution_IHC-P">IHC-P~~N/A</span><br \><span class
="dilution_IHC-F">IHC-F~~N/A</span><br \><span class
="dilution_IF">IF~~1:50~200</span><br \><span class ="dilution_E">E~~N/A</span>
```

# **Storage**

Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

### **MDFIC Polyclonal Antibody - Protein Information**

#### Name MDFIC (HGNC:28870)

#### **Function**

Required to control the activity of various transcription factors through their sequestration in the cytoplasm. Retains nuclear Zic proteins ZIC1, ZIC2 and ZIC3 in the cytoplasm and inhibits their transcriptional activation (By similarity). Modulates the expression from cellular promoters. Binds to the axin complex, resulting in an increase in the level of free beta-catenin (PubMed:<a href="http://www.uniprot.org/citations/12192039" target="\_blank">12192039</a>). Affects axin regulation of the WNT and JNK signaling pathways (PubMed:<a href="http://www.uniprot.org/citations/12192039" target="\_blank">12192039</a>). Involved in the development of lymphatic vessel valves (By similarity). Required to promote lymphatic

endothelial cell migration, in a process that involves down-regulation of integrin beta 1 activation and control of cell adhesion to the extracellular matrix (PubMed:<a href="http://www.uniprot.org/citations/35235341" target="\_blank">35235341</a>). Regulates

the activity of mechanosensitive Piezo channel (PubMed:<a href="http://www.uniprot.org/citations/37590348" target=" blank">37590348</a>).

### **Cellular Location**

[Isoform 1]: Nucleus, nucleolus. Note=Also shows a granular distribution in the cytoplasm

#### Tissue Location

Expressed in lymphatic tissues. Detected in the spleen, thymus, peripheral blood leukocytes as well as prostate, uterus and small intestine. Expressed in lymphatic endothelial cells (PubMed:35235341).

### **MDFIC Polyclonal Antibody - Protocols**

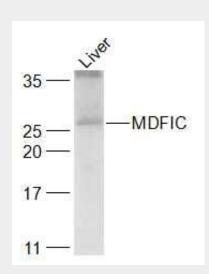
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot



- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

# **MDFIC Polyclonal Antibody - Images**



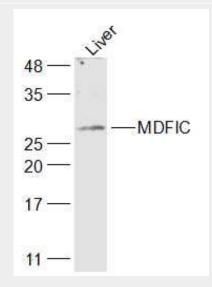
Sample:

Liver (Mouse) Lysate at 40 ug

Primary: Anti-MDFIC (bs-6386R) at 1/1000 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 26 kD Observed band size: 26 kD



Sample:

Liver (Rat) Lysate at 40 ug

Primary: Anti-MDFIC (bs-6386R) at 1/1000 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 26 kD Observed band size: 26/27 kD

