

# MDFIC Antibody (N-term) Blocking Peptide

Synthetic peptide Catalog # BP8709a

## Specification

# MDFIC Antibody (N-term) Blocking Peptide - Product Information

Primary Accession

<u>Q9P1T7</u>

# MDFIC Antibody (N-term) Blocking Peptide - 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

The synthetic peptide sequence used to generate the antibody <a href=/products/AP8709a>AP8709a</a> was selected from the N-term region of human MDFIC. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

#### Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

#### Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

#### MDFIC Antibody (N-term) Blocking Peptide - Protein Information

#### Name MDFIC (<u>HGNC:28870</u>)

#### 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 Antibody (N-term) Blocking Peptide - Protocols

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

#### <u>Blocking Peptides</u>

#### MDFIC Antibody (N-term) Blocking Peptide - Images

#### MDFIC Antibody (N-term) Blocking Peptide - Background

MDFIC 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.

#### MDFIC Antibody (N-term) Blocking Peptide - References

Thebault, S. et.al., Curr. Protein Pept. Sci. 2 (2), 155-167 (2001)