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MDFIC Antibody (N-term) Blocking Peptide
Synthetic peptide
Catalog # BP8709a

Specification

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

Primary Accession Q9P1T7

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 (HGNC:28870)

Target/Specificity
The synthetic peptide sequence used to generate the antibody AP8709a 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 (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 both cellular and viral promoters. Down-regulates Tat-dependent transcription of the human immunodeficiency virus type 1 (HIV-1) LTR by interacting with HIV-1 Tat and Rev and impairing their nuclear import, probably by rendering the NLS domains inaccessible to importin-beta (PubMed:16260749, PubMed:12944466, Ref.6). Also stimulates activation of human T-cell leukemia virus type I (HTLV-I) LTR (PubMed:10671520). Binds to the

axin complex, resulting in an increase in the level of free beta-catenin (PubMed:12192039). Affects axin regulation of the WNT and JNK signaling pathways (PubMed:12192039). Has a role in the development of lymphatic vessel valves. It is 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:35235341) (By similarity).

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.

- Blocking Peptides

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)