

## **NMI Antibody**

Rabbit mAb Catalog # AP93099

## **Specification**

## **NMI Antibody - Product Information**

Application WB, IHC, ICC, IP

Primary Accession O13287
Clonality Monoclonal

**Other Names** 

N myc interactor; NMI; NMYC and STAT interactor; NMYC interactor;

Isotype Rabbit IgG
Host Rabbit
Calculated MW 35057 Da

## **NMI Antibody - Additional Information**

Purification Affinity-chromatography

Immunogen A synthesized peptide derived from human

NMI

Description NMYC interactor (NMI) encodes a protein

that interacts with NMYC and CMYC (two members of the oncogene Myc family), and other transcription factors containing a

Zip, HLH, or HLH Zip motif.

Storage Condition and Buffer Rabbit IgG in phosphate buffered saline,

pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid

freeze / thaw cycle.

## **NMI Antibody - Protein Information**

Name NMI (HGNC:7854)

### **Function**

Acts as a signaling pathway regulator involved in innate immune system response (PubMed:<a href="http://www.uniprot.org/citations/26342464" target="\_blank">26342464</a>, PubMed:<a href="http://www.uniprot.org/citations/29038465" target="\_blank">29038465</a>, PubMed:<a href="http://www.uniprot.org/citations/29350881" target="\_blank">29350881</a>, PubMed:<a href="http://www.uniprot.org/citations/29350881" target="\_blank">29350881</a>, PubMed:<a href="http://www.uniprot.org/citations/9989503" target="\_blank">9989503</a>). In response to interleukin 2/IL2 and interferon IFN-gamma/IFNG, interacts with signal transducer and activator of transcription/STAT which activate the transcription of downstream genes involved in a multitude of signals for development and homeostasis (PubMed:<a

href="http://www.uniprot.org/citations/29377960" target="\_blank">29377960</a>, PubMed:<a href="http://www.uniprot.org/citations/9989503" target="\_blank">9989503</a>). Enhances the recruitment of CBP/p300 coactivators to STAT1 and STAT5, resulting in increased STAT1- and STAT5-dependent transcription (PubMed:<a href="http://www.uniprot.org/citations/9989503"



target="\_blank">9989503</a>). In response to interferon IFN-alpha, associates in a complex with signaling pathway regulator IFI35 to regulate immune response; the complex formation prevents proteasome-mediated degradation of IFI35 (PubMed:<a

href="http://www.uniprot.org/citations/10779520" target="\_blank">10779520</a>, PubMed:<a href="http://www.uniprot.org/citations/10950963" target="\_blank">10950963</a>). In complex with IFI35, inhibits virus-triggered type I IFN-beta production when ubiquitinated by ubiquitin-protein ligase TRIM21 (PubMed:<a href="http://www.uniprot.org/citations/26342464" target="\_blank">26342464</a>). In complex with IFI35, negatively regulates nuclear factor NF-kappa-B signaling by inhibiting the nuclear translocation, activation and transcription of NF-kappa-B subunit p65/RELA, resulting in the inhibition of endothelial cell proliferation, migration and re-endothelialization of injured arteries (PubMed:<a

href="http://www.uniprot.org/citations/29350881" target="\_blank">29350881</a>). Negatively regulates virus-triggered type I interferon/IFN production by inducing proteosome-dependent degradation of IRF7, a transcriptional regulator of type I IFN, thereby interfering with cellular antiviral responses (By similarity). Beside its role as an intracellular signaling pathway regulator, also functions extracellularly as damage-associated molecular patterns (DAMPs) to promote inflammation, when actively released by macrophage to the extracellular space during cell injury or pathogen invasion (PubMed:<a href="http://www.uniprot.org/citations/29038465" target="\_blank">29038465</a>). Macrophage-secreted NMI activates NF-kappa-B signaling in adjacent macrophages through Toll-like receptor 4/TLR4 binding and activation, thereby inducing NF-kappa-B translocation from the cytoplasm into the nucleus which promotes the release of proinflammatory cytokines (PubMed:<a href="http://www.uniprot.org/citations/29038465" target="blank">29038465</a>).

#### **Cellular Location**

Cytoplasm. Nucleus. Secreted Note=Cytoplasmic NMI localizes in punctate granular structures (PubMed:10950963, PubMed:9781816). Nuclear localization increased following IFN-alpha treatment (PubMed:10950963, PubMed:9781816) Extracelullar following secretion by macrophage (PubMed:29038465)

## **Tissue Location**

Expressed in adult spleen, liver, and kidney (PubMed:9781816). Expressed in fetal thymus, liver, placenta, spleen, lung, and kidney but not brain (PubMed:9781816). Expressed in macrophages (PubMed:29038465).

## **NMI Antibody - Protocols**

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

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

# **NMI Antibody - Images**



