

**Anti-NMI Picoband Antibody** 

Catalog # ABO12031

## Specification

# Anti-NMI Picoband Antibody - Product Information

ApplicationWB, IHC-PPrimary AccessionQ13287HostRabbitReactivityHumanClonalityPolyclonalFormatLyophilizedDescriptionRabbit IgG polyclonal antibody for N-myc-interactor(NMI) detection. Tested with WB, IHC-P inHuman.

**Reconstitution** Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

## Anti-NMI Picoband Antibody - Additional Information

Gene ID 9111

Other Names N-myc-interactor, Nmi, N-myc and STAT interactor, NMI

Calculated MW 35057 MW KDa

**Application Details** Immunohistochemistry(Paraffin-embedded Section), 0.5-1 μg/ml, Human, By Heat<br>Western blot, 0.1-0.5 μg/ml, Human<br>

Subcellular Localization Cytoplasm.

**Tissue Specificity** Expressed in all adult and fetal tissues except brain and skin. More abundant in fetal tissues especially liver.

Protein Name N-myc-interactor

Contents Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.

Immunogen

E.coli-derived human NMI recombinant protein (Position: E2-E307). Human NMI shares 64% amino acid (aa) sequence identity with mouse NMI.



**Purification** Immunogen affinity purified.

**Cross Reactivity** No cross reactivity with other proteins

Storage

At -20°C for one year. After r°Constitution, at 4°C for one month. It°Can also be aliquotted and stored frozen at -20°C for a longer time.Avoid repeated freezing and thawing.

# **Anti-NMI Picoband 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/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>). 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).

## **Anti-NMI Picoband Antibody - Protocols**

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

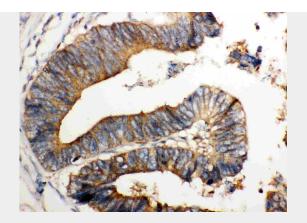
- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

### Anti-NMI Picoband Antibody - Images

130KD -	1	2	3
100KD —			
70KD -			
55KD -			
35KD-	-	-	-
25KD-			
15KD -			

Anti- NMI Picoband antibody, ABO12031, Western blottingAll lanes: Anti NMI (ABO12031) at 0.5ug/mlLane 1: Human Placenta Tissue Lysate at 50ugLane 2: A549 Whole Cell Lysate at 40ugLane 3: HELA Whole Cell Lysate at 40ugPredicted bind size: 35KDObserved bind size: 35KD





Anti- NMI Picoband antibody, ABO12031, IHC(P) IHC(P): Human Intestinal Tissue

# Anti-NMI Picoband Antibody - Background

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. The NMI protein also interacts with all STATs except STAT2 and augments STAT-mediated transcription in response to cytokines IL2 and IFN-gamma. The NMI mRNA has low expression levels in all human fetal and adult tissues tested except brain and has high expression in cancer cell line-myeloid leukemias.