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Anti-NEMO (RABBIT) Antibody
NEMO/IKK-gamma Antibody
Catalog # ASR4473

Specification

Anti-NEMO (RABBIT) Antibody - Product Information

Host	**Rabbit**
Conjugate	**Unconjugated**
Target Species	**Human**
Reactivity	**Human**
Clonality	**Polyclonal**
Application	**WB, E, IP, I, LCI**
Application Note	**Anti-NEMO antibody has been tested by western blot and is suitable for immunoprecipitation and ELISA. Specific conditions for reactivity should be optimized by the end user. Expect a band approximately 48kDa in size corresponding to endogenous NEMO protein by western blotting in the appropriate cell lysate or extract.**
Physical State	**Liquid (sterile filtered)**
Buffer	**0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2**
Immunogen	**Anti-NEMO was affinity purified from whole rabbit serum prepared by repeated immunizations with a recombinant protein of human NEMO.**
Preservative	**0.01% (w/v) Sodium Azide**

Anti-NEMO (RABBIT) Antibody - Additional Information

Gene ID 8517

Other Names
8517

Purity
Anti-NEMO is an IgG fraction antibody purified from monospecific antiserum by a multi-step process which includes delipidation, salt fractionation and ion exchange chromatography followed by extensive dialysis against the buffer stated above. This antibody detects human NEMO. Cross reactivity with NEMO from other sources is unknown.

Storage Condition
Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.

Precautions Note

This product is for research use only and is not intended for therapeutic or diagnostic applications.

Anti-NEMO (RABBIT) Antibody - Protein Information

Name IKBKG (HGNC:5961)

Synonyms FIP3, NEMO

Function
Regulatory subunit of the IKK core complex which phosphorylates inhibitors of NF-kappa-B thus leading to the dissociation of the inhibitor/NF-kappa-B complex and ultimately the degradation of the inhibitor (PubMed:14695475, PubMed:20724660, PubMed:21518757, PubMed:9751060). Its binding to scaffolding polyubiquitin plays a key role in IKK activation by multiple signaling receptor pathways (PubMed:16547522, PubMed:18287044, PubMed:19033441, PubMed:19185524, PubMed:21606507, PubMed:27777308, PubMed:33567255). Can recognize and bind both 'Lys-63'-linked and linear polyubiquitin upon cell stimulation, with a much higher affinity for linear polyubiquitin (PubMed:16547522, PubMed:18287044, PubMed:19033441, PubMed:19185524, PubMed:21606507, PubMed:27777308). Could be implicated in NF-kappa-B-mediated protection from cytokine toxicity. Essential for viral activation of IRF3 (PubMed:19854139). Involved in TLR3- and IFIH1-mediated antiviral innate response; this function requires 'Lys- 27'-linked polyubiquitination (PubMed:20724660).

Cellular Location
Cytoplasm. Nucleus Note=Sumoylated NEMO accumulates in the nucleus in response to genotoxic stress.

Tissue Location
Heart, brain, placenta, lung, liver, skeletal muscle, kidney and pancreas

Anti-NEMO (RABBIT) Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry

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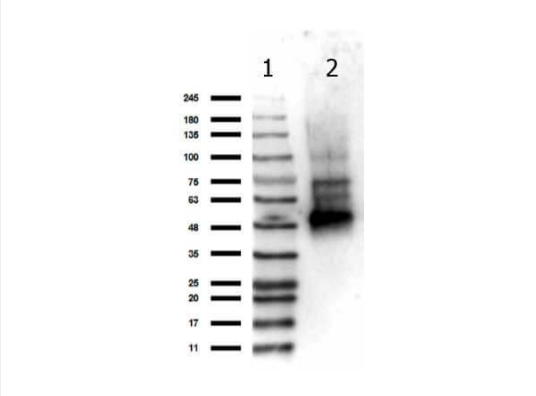
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-NEMO (RABBIT) Antibody - Images



Western Blot of Rabbit anti-NEMO antibody. Lane 1: Opal Pre-stained ladder (p/n MB-210-0500). Lane 2: Recombinant NEMO protein. Load: 175 ng per lane. Primary antibody: NEMO antibody at 1:1,000 for overnight at 4°C. Secondary antibody: Peroxidase rabbit secondary antibody (p/n 611-103-122) at 1:70,000 for 30 min at RT. Blocking Buffer: MB-070 for 30 min at RT. Predicted MW: ~55kDa. Observed MW: ~50kDa for NEMO.

Anti-NEMO (RABBIT) Antibody - Background

Anti-NEMO antibody was designed, produced, and validated as part of the Joy Cappel Young Investigator Award (JCYIA). Anti-NEMO antibody detects recombinant and endogenous NEMO. NEMO, the regulatory subunit of the IKK core complex, phosphorylates inhibitors of NF-kappa-B thus leading to the dissociation of the inhibitor/NF-kappa-B complex and ultimately the degradation of the inhibitor. Its binding to scaffolding polyubiquitin seems to play a role in IKK activation by multiple signaling receptor pathways. Nemo is also considered to be a mediator for TAX activation of NF-kappa-B and may be implicated in NF-kappa-B-mediated protection from cytokine toxicity. NEMO is essential for viral activation of IRF3 and involved in TLR3- and IFIH1-mediated antiviral innate response. The innate antiviral response from NEMO requires 'Lys-27'-linked polyubiquitination. Anti-NEMO is ideal for researchers interested in Immunology and Cancer research.