

## NFKBIL2 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP17737A

## Specification

## NFKBIL2 Antibody (N-term) - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Isotype Calculated MW Antigen Region WB,E <u>Q96HA7</u> <u>NP\_038460.4</u> Human Rabbit Polyclonal Rabbit IgG 150929 38-65

## NFKBIL2 Antibody (N-term) - Additional Information

### Gene ID 4796

### **Other Names**

Tonsoku-like protein, Inhibitor of kappa B-related protein, I-kappa-B-related protein, IkappaBR, NF-kappa-B inhibitor-like protein 2, Nuclear factor of kappa light polypeptide gene enhancer in B-cells inhibitor-like 2, TONSL, IKBR, NFKBIL2

#### Target/Specificity

This NFKBIL2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 38-65 amino acids from the N-terminal region of human NFKBIL2.

Dilution WB~~1:1000

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

#### Precautions

NFKBIL2 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

# NFKBIL2 Antibody (N-term) - Protein Information

Name TONSL {ECO:0000303|PubMed:21055983, ECO:0000312|HGNC:HGNC:7801}



**Function** Component of the MMS22L-TONSL complex, a complex that promotes homologous recombination-mediated repair of double-strand breaks (DSBs) at stalled or collapsed replication forks (PubMed:<u>21055983</u>, PubMed:<u>21055984</u>, PubMed:<u>21055985</u>, PubMed:<u>21113133</u>, PubMed:<u>26527279</u>, PubMed:<u>27338793</u>, PubMed:<u>27797818</u>, PubMed:<u>29478807</u>, PubMed:<u>30773278</u>). The MMS22L-TONSL complex is required to maintain genome integrity during DNA replication (PubMed:<u>21055983</u>, PubMed:<u>21055984</u>, PubMed:<u>21055985</u>). It mediates the assembly of RAD51 filaments on single-stranded DNA (ssDNA): the MMS22L-TONSL complex is recruited to DSBs following histone replacement by histone chaperones and eviction of the replication protein A complex (RPA/RP-A) from DSBs (PubMed:<u>21055983</u>, PubMed:<u>21055984</u>, PubMed:<u>21055985</u>, PubMed:<u>27797818</u>, PubMed:<u>29478807</u>). Following recruitment to DSBs, the TONSL-MMS22L complex promotes recruitment of RAD51 filaments and subsequent homologous recombination (PubMed:<u>27797818</u>, PubMed:<u>29478807</u>). Within the complex, TONSL acts as a histone reader, which recognizes and binds newly synthesized histones following their replacement by histone chaperones (PubMed:<u>27338793</u>, PubMed:<u>29478807</u>). Specifically binds histone H4 lacking methylation at 'Lys-20' (H4K20me0) and histone H3.1 (PubMed:<u>27338793</u>).

### **Cellular Location**

Nucleus. Chromosome. Cytoplasm Note=Mainly nuclear (PubMed:21055983, PubMed:21055984). Localizes to DNA damage sites, accumulates at stressed replication forks (PubMed:21055983, PubMed:21055984, PubMed:26527279, PubMed:27338793) Recruited to stalled or collapsed replication forks following histone replacement by histone chaperones ASF1A and the CAF-1 complex: TONSL acts as a histone reader that recognizes and binds newly synthesized histones (PubMed:29478807).

**Tissue Location** 

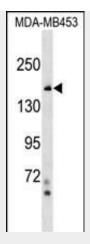
Expressed in heart, skeletal muscle and tracheal epithelial cells.

## NFKBIL2 Antibody (N-term) - Protocols

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

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

NFKBIL2 Antibody (N-term) - Images



NFKBIL2 Antibody (N-term) (Cat. #AP17737a) western blot analysis in MDA-MB453 cell line lysates (35ug/lane). This demonstrates the NFKBIL2 antibody detected the NFKBIL2 protein (arrow).

# NFKBIL2 Antibody (N-term) - Background

The protein encoded by this gene is thought to be a negative regulator of NF-kappa-B mediated transcription. The encoded protein may bind NF-kappa-B complexes and trap them in the cytoplasm, preventing them from entering the nucleus and interacting with the DNA. Phosphorylation of this protein targets it for degradation by the ubiquitination pathway, which frees the NF-kappa-B complexes to enter the nucleus.

# NFKBIL2 Antibody (N-term) - References

Wang, Y., et al. J. Hum. Genet. 55(8):490-494(2010) Ewing, R.M., et al. Mol. Syst. Biol. 3, 89 (2007) : Norman, D.A., et al. Ann. Hum. Genet. 64 (PT 1), 15-23 (2000) : Ray, P., et al. J. Biol. Chem. 270(18):10680-10685(1995)