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# Goat Anti-NFIL3 Antibody

**Peptide-affinity purified goat antibody**
**Catalog # AF1729a**

## Specification

### Goat Anti-NFIL3 Antibody - Product Information

| | |
|---|---|
| Application | **WB, E** |
| Primary Accession | Q16649 |
| Other Accession | NP_005375, 4783, 18030 (mouse), 114519 (rat) |
| Reactivity | **Human** |
| Predicted | **Mouse, Rat** |
| Host | **Goat** |
| Clonality | **Polyclonal** |
| Concentration | **100ug/200ul** |
| Isotype | **IgG** |
| Calculated MW | **51472** |

### Goat Anti-NFIL3 Antibody - Additional Information

**Gene ID** 4783

**Other Names**
Nuclear factor interleukin-3-regulated protein, E4 promoter-binding protein 4, Interleukin-3 promoter transcriptional activator, Interleukin-3-binding protein 1, Transcriptional activator NF-IL3A, NFIL3, E4BP4, IL3BP1

**Dilution**
WB~~1:1000
E~~N/A

**Format**
0.5 mg IgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

**Storage**
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**
Goat Anti-NFIL3 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

### Goat Anti-NFIL3 Antibody - Protein Information

**Name** NFIL3

**Synonyms** E4BP4, IL3BP1

**Function**
Acts as a transcriptional regulator that recognizes and binds to the sequence 5'-[GA]TTA[CT]GTAA[CT]-3', a sequence present in many cellular and viral promoters. Represses transcription from promoters with activating transcription factor (ATF) sites. Represses promoter activity in osteoblasts (By similarity). Represses transcriptional activity of PER1 (By similarity). Represses transcriptional activity of PER2 via the B-site on the promoter (By similarity). Activates transcription from the interleukin-3 promoter in T-cells. Competes for the same consensus-binding site with PAR DNA-binding factors (DBP, HLF and TEF) (By similarity). Component of the circadian clock that acts as a negative regulator for the circadian expression of PER2 oscillation in the cell-autonomous core clock (By similarity). Protects pro-B cells from programmed cell death (By similarity). Represses the transcription of CYP2A5 (By similarity). Positively regulates the expression and activity of CES2 by antagonizing the repressive action of NR1D1 on CES2 (By similarity). Required for the development of natural killer cell precursors (By similarity).

**Cellular Location**
Nucleus {ECO:0000255|PROSITE-ProRule:PRU00978}.

**Tissue Location**
Expressed in bladder stomach, thyroid, spinal cord, lymph node, trachea, adrenal gland, bone marrow and muscle

## Goat Anti-NFIL3 Antibody - 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
- Cell Culture

## Goat Anti-NFIL3 Antibody - Images


AF1729a staining (0.5 µg/ml) of HepG2 lysate (RIPA buffer, 20 µg total protein per lane). Primary incubated for 1 hour. Detected by western blot using chemiluminescence.

## Goat Anti-NFIL3 Antibody - Background

Expression of interleukin-3 (IL3; MIM 147740) is restricted to activated T cells, natural killer (NK) cells, and mast cell lines. Transcription initiation depends on the activating capacity of specific protein factors, such as NFIL3, that bind to regulatory regions of the gene, usually upstream of the transcription start site (Zhang et al., 1995 [PubMed 7565758]).

## Goat Anti-NFIL3 Antibody - References

Personalized smoking cessation: interactions between nicotine dose, dependence and quit-success genotype score. Rose JE, et al. Mol Med, 2010 Jul-Aug. PMID 20379614.
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Association study of 21 circadian genes with bipolar I disorder, schizoaffective disorder, and schizophrenia. Mansour HA, et al. Bipolar Disord, 2009 Nov. PMID 19839995.
PER2 variantion is associated with depression vulnerability. Lavebratt C, et al. Am J Med Genet B Neuropsychiatr Genet, 2010 Mar 5. PMID 19693801.
Identification of adjacent binding sites for the YY1 and E4BP4 transcription factors in the ovine PrP (Prion) gene promoter. Burgess ST, et al. J Biol Chem, 2009 Mar 13. PMID 19129193.