

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human NFIL3/E4BP4 in direct ELISAs.
Source	Monoclonal Mouse IgG ₁ Clone # 714401
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant human NFIL3/E4BP4 Lys140-Gly462 Accession # Q16649
Conjugate	Alexa Fluor 488 Excitation Wavelength: 488 nm Emission Wavelength: 515-545 nm
Formulation	Supplied 0.2 mg/mL in a saline solution containing BSA and Sodium Azide. See Certificate of Analysis for details. *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

	Recommended Concentration	Sample
Flow Cytometry	0.25-1 µg/10 ⁶ cells	Human peripheral blood mononuclear cells (PBMCs) treated with PMA and Calcium Ionomycin were fixed and permeabilized with FlowX FoxP3 Fixation & Permeabilization Buffer Kit (Catalog # FC012)

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Do not freeze. <ul style="list-style-type: none"> 12 months from date of receipt, 2 to 8 °C as supplied.

BACKGROUND

NFIL3 (Nuclear Factor, Interleukin 3 Regulated), also called E4BP4 (adenovirus E4 promoter binding protein 4), is an approximately 58 kDa transcription factor of the bZIP (basic leucine zipper) family. It is a transcriptional regulator expressed in T and pro-B lymphocytes and cardiomyocytes, binds IL-3 and promoters as a homodimer, and enhances cell survival. NFIL3 has also been shown to be involved in the development of Innate Lymphoid Cells (ILCs; 1,2). The 462 amino acid (aa) human NFIL3 contains a basic DNA binding domain (aa 73-95), a leucine zipper (aa 96-124), and a transcriptional repression domain (aa 299-363) that is potentially regulated by phosphorylation at Ser301 and Ser353. Within the region used as an immunogen, human NFIL3 shares 83% aa sequence identity with mouse and rat NFIL3.

References:

1. Seillet C, et al (2014) J Exp Med. **211**:1733.
2. Geiger TL, et al (2014) J Exp Med. **211**:1723.

PRODUCT SPECIFIC NOTICES

This product is provided under an agreement between Life Technologies Corporation and R&D Systems, Inc, and the manufacture, use, sale or import of this product is subject to one or more US patents and corresponding non-US equivalents, owned by Life Technologies Corporation and its affiliates. The purchase of this product conveys to the buyer the non-transferable right to use the purchased amount of the product and components of the product only in research conducted by the buyer (whether the buyer is an academic or for-profit entity). The sale of this product is expressly conditioned on the buyer not using the product or its components (1) in manufacturing; (2) to provide a service, information, or data to an unaffiliated third party for payment; (3) for therapeutic, diagnostic or prophylactic purposes; (4) to resell, sell, or otherwise transfer this product or its components to any third party, or for any other commercial purpose. Life Technologies Corporation will not assert a claim against the buyer of the infringement of the above patents based on the manufacture, use or sale of a commercial product developed in research by the buyer in which this product or its components was employed, provided that neither this product nor any of its components was used in the manufacture of such product. For information on purchasing a license to this product for purposes other than research, contact Life Technologies Corporation, Cell Analysis Business Unit, Business Development, 29851 Willow Creek Road, Eugene, OR 97402, Tel: (541) 465-8300. Fax: (541) 335-0354.