

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 594 Excitation Wavelength: 590 nm Emission Wavelength: 617 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. 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:

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

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