

DESCRIPTION

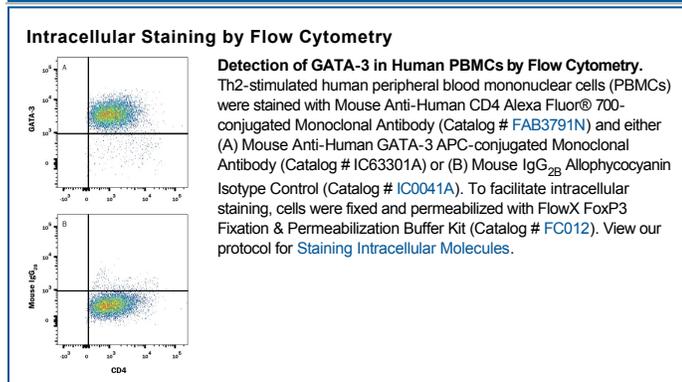
Species Reactivity	Human
Specificity	Detects human GATA-3 in flow cytometry.
Source	Monoclonal Mouse IgG _{2B} Clone # 634919
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant human GATA-3 Pro135-Ser258 Accession # P23771
Conjugate	Allophycocyanin Excitation Wavelength: 620-650 nm Emission Wavelength: 660-670 nm
Formulation	Supplied 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
Intracellular Staining by Flow Cytometry	10 µL/10 ⁶ cells	See Below

DATA



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

GATA-3 is a 54-60 kDa member of the GATA family of transcription regulating factors. There are currently six mammalian members, each of which binds to a G-A-T-A motif found in gene promoters. Although GATA-3 is traditionally described as being a hematopoietic transcriptional regulator, it has been found in multiple cell types, both embryonic and adult. Postnatal cells reported to express GATA-3 include NK cells, ILCs, NKT cells, B cells, thymocytes (DN, CD4 SP, and CD8 SP) and T cells, plus keratinocytes, sympathetic neurons, renal distal convoluted tubule and mammary duct epithelium. Human GATA-3 is 443 amino acids (aa) in length. It contains two GAGA-type Zn finger domains (aa 263-287 and 317-341) and multiple phosphorylation sites. GATAs as a group are known to either activate, or repress, gene expression, maintain transcriptional activity, and regulate gene expression levels. Within this framework, GATA-3 is best known to drive naïve CD4+ T cells into a Th2 phenotype, induce Th2 proliferation, and inhibit Th1 cell development via T-bet repression. Other effects attributed to GATA-3 include the promotion of Th9 and Treg formation, and the inhibition of Th1, TH17 and B cell development. Over aa 135-258, human and mouse GATA-3 share 94% aa sequence identity.