

DESCRIPTION

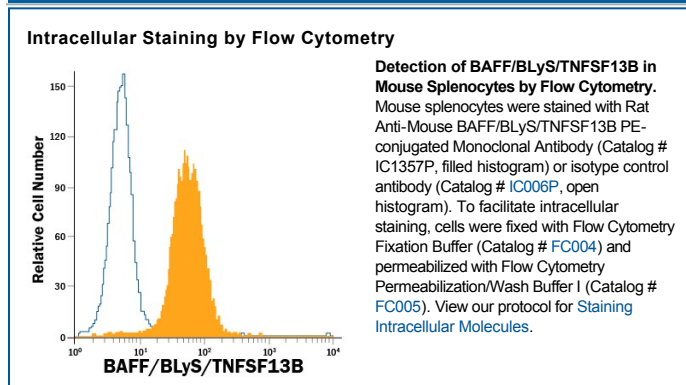
Species Reactivity	Mouse
Specificity	Detects mouse BAFF in direct ELISAs and Western blots. In Western blots, this antibody does not cross-react with recombinant mouse (rm) 4-1BB Ligand, rmEDA, rmFas Ligand, rmOX40 Ligand, rmTNF- α , rmTRANCE, rmTWEAK, recombinant human (rh) APRIL, rhBAFF, rhEDA-A2, rhGITR Ligand, rhLIGHT, rhLymphotoxin α 1/ β 2, rhLymphotoxin α 2/ β 1, rhTNF- α , rhTRAIL, rhVEGI, recombinant canine, cotton rat, equine, feline, porcine, or rat TNF- α .
Source	Monoclonal Rat IgG _{2A} Clone # 121808
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Mouse myeloma cell line NS0-derived recombinant mouse BAFF Ala127-Leu309 Accession # Q9WU72
Conjugate	Phycoerythrin Excitation Wavelength: 488 nm Emission Wavelength: 565-605 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 μ L/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

BAFF (also known as TALL-1, BLyS, THANK) is a 34-36 kDa type II transmembrane glycoprotein belonging to the BAFF family of the TNF superfamily, and has been designated as TNF superfamily member 13B (TNFSF13B). Mouse BAFF is a 309 amino acid (aa) protein consisting of a 248 aa extracellular domain, a 21 aa transmembrane region and a 45 aa cytoplasmic tail. BAFF has the typical structural characteristics of the TNF superfamily ligands. It is a homotrimeric protein having the structurally conserved motif known as TNF homology domain. Mouse BAFF may be shed from the cell surface by proteolytic cleavage between R126 and Ala 127 to yield a soluble form of the protein detectable in serum. Within the TNF superfamily, BAFF shares the highest homology (48%) with APRIL, the only other member of the BAFF family of molecules. BAFF and APRIL both bind to BCMA and TACI, while BAFF also binds specifically to BAFF receptor (BAFF R, also known as BR3 or TNFSFR13C), which represents the principal BAFF receptor. All three receptors are type III transmembrane proteins that are expressed on B cells, monocytes, osteoclasts, activated T cells, adipocytes, keratinocytes and microglia. BAFF and APRIL can form active heteromers that bind TACI. BAFF is expressed by monocytes, osteoclasts, astrocytes, neutrophils, follicular T helper cells, dendritic cells and specialized fibroblasts. Its expression in resting monocytes is upregulated by IFN- α , IFN- β , LPS and IL-10. BAFF provides critical survival signals to a subset of B cells with intermediate maturation status (T2 B cells) during the immune response. BAFF also plays an important role in the development of lymphoid tissue and enhances the survival of activated memory B cells. Recent reports also show a role for BAFF in osteoclast formation. Over aa 127-309, mouse BAFF shares 93 and 72% aa sequence identity with rat and human BAFF, respectively.