

12-4253: Phospho-c-Cbl (Tyr774) (Clone: R3B8) rabbit mAb APC conjugate

Clonality :	Monoclonal
Clone Name :	CblY774-R3B8
Application :	FACS
Reactivity :	Human, Mouse
Conjugate :	APC
Format :	Conjugated
Alternative Name :	E3 ubiquitin-protein ligase CBL, Casitas B-lineage lymphoma proto-oncogene, Proto-oncogene c-Cbl, RING finger protein 55, RING-type E3 ubiquitin transferase, Signal transduction protein CBL, CBL2, RNF55
Isotype :	Rabbit IgG1k
Immunogen Information :	A synthetic phospho-peptide corresponding to residues surrounding Tyr774 of human phospho c-Cbl

Description

The c-Cbl (Casitas B-lineage Lymphoma) proto-oncogene is a ubiquitously expressed cytoplasmic adaptor protein that contains multiple functional domains, including an amino-terminal tyrosine kinase-binding (TKB) domain, a RING finger motif, and a proline-rich region. The TKB recognizes phosphorylated tyrosines on activated receptor tyrosine kinases (RTKs) and on other nonreceptor tyrosine kinases, while the RING finger motif recruits ubiquitin-conjugating enzymes. These two domains are primarily responsible for the ubiquitin ligase activity of c-Cbl and downregulation of RTKs (1). The proline-rich region contains 14-3-3 protein-binding and SH3 domain-binding motifs. c-Cbl is phosphorylated at Y700, Y731, and Y774 by Syk- and Src-family kinases after the stimulation of some integrins and a wide variety of receptors for immunoglobulins, antigens, hormones, growth factors, and cytokines. Phosphorylated Y774 interacts with the SH2 domain of Crk (1,2). The c-Cbl adapter protein is expressed in the cytoplasm in all tissues, with especially high levels of expression in hematopoietic cells (3,4). Through its many functional sites, c-Cbl plays key roles in the positive and negative regulation of vital cell functions, including T Cell Receptor-mediated cellular immune responses. In human cancer tissues, c-Cbl is frequently tyrosine-phosphorylated in a tumor-specific manner (5).

Product Info

Amount :	10 Tests / 100 Tests
Content :	1X PBS, 0.09% NaN3, 0.2% BSA
Storage condition :	Store at 2-8°C. Avoid repeated freeze and thaw cycles.

Application Note

For flow cytometric staining, the suggested use of this reagent is 5 $\mu\text{g}/\text{mL}$ per million cells or 5 $\mu\text{g}/\text{mL}$ per 100 μL of staining volume. It is recommended that the reagent be titrated for optimal performance for each application.

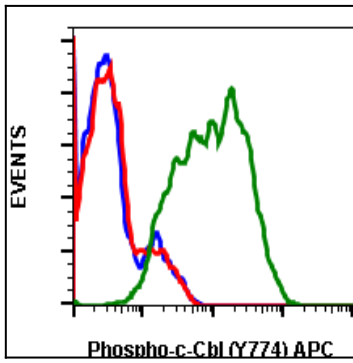


Fig-1: Flow cytometric analysis of Daudi cells cell only (blue) or untreated (red) or treated with IFN α + IL-4 + pervanadate (green) using Phospho-c-Cbl (Tyr774) APC-conjugated antibody CblY774-R3B8.