

## 12-4259: Phospho-c-Cbl (Tyr700) (Clone: E1) rabbit mAb SureLight 488 conjugate

<b>Clonality :</b>	Monoclonal
<b>Clone Name :</b>	CblY700-E1
<b>Application :</b>	FACS
<b>Reactivity :</b>	Human, Mouse, Rat
<b>Conjugate :</b>	SureLight 488
<b>Format :</b>	Conjugated
<b>Alternative Name :</b>	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
<b>Isotype :</b>	Rabbit IgG1k
<b>Immunogen Information :</b>	A synthetic phospho-peptide corresponding to residues surrounding Tyr700 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

<b>Amount :</b>	10 Tests / 100 Tests
<b>Content :</b>	1X PBS, 0.09% NaN <sub>3</sub> , 0.2% BSA
<b>Storage condition :</b>	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  $\mu\text{L}$  of staining volume. It is recommended that the reagent be titrated for optimal performance for each application.

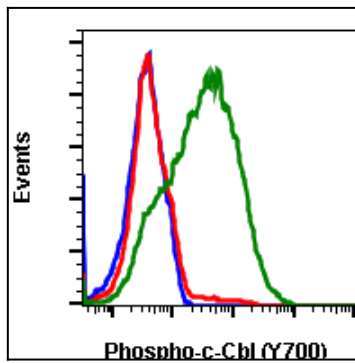


Fig-1: Flow cytometric analysis of C6 cells cell only only negative control (blue) or treated with imatinib (red) or with pervanadate (green) using Phospho-c-Cbl (Tyr700) SureLight 488-conjugated antibody CbIY700-E1.