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12-4255: Phospho-c-Cbl (Tyr700) (Clone: E1) rabbit mAb

Clonality :	Monoclonal
Clone Name :	CblY700-E1
Application :	FACS
Reactivity :	Human, Mouse, Rat
Conjugate :	Unconjugated
Format :	Purified
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 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

Amount :	20 µl / 200 µl
Content :	1X PBS, 0.02% NaN3, 50% Glycerol, 0.1% BSA
Storage condition :	Store at -20°C. Avoid repeated freeze and thaw cycles.

Application Note

1Ã‚µg/mL - 0.001Ã‚µg/mL. It is recommended that the reagent be titrated for optimal performance for each application. See product image legends for additional information.(0.5mg/ml, more than 200 western blots)

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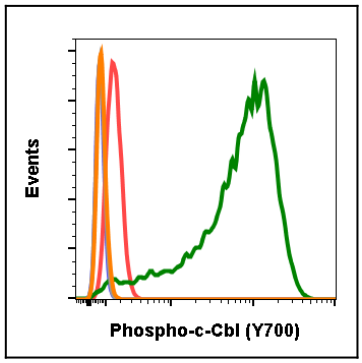
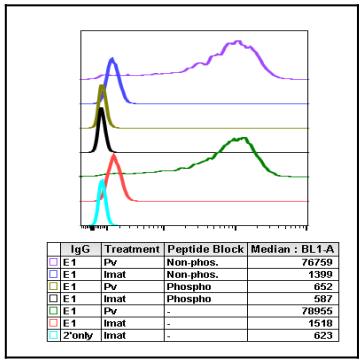


Fig-1: Flow cytometric analysis of C6 cells secondary antibody only negative control (blue) or treated with imatinib (grey) or with pervanadate (orange) using 0.1 µg/mL isotype control or imatinib (red) or pervanadate (green) using Phospho-c-Cbl (Tyr700) antibody CblY700-E1 at 0.1 µg/mL.



IgG	Treatment	Peptide Block	Median : BL1-A
E1	Pv	Non-phos.	76759
E1	Imat	Non-phos.	1399
E1	Pv	Phospho	652
E1	Imat	Phospho	587
E1	Pv	-	78955
E1	Imat	-	1518
2°only	Imat	-	623

Fig 2 : Peptide blocking flow cytometric analysis of C6 cells, secondary antibody only negative control (light blue) or treated with imatinib (red) or with pervanadate (green) or imatinib and blocked with phospho-peptide (black) or pervanadate and blocked with phospho peptide (gold) or imatinib and blocked with non-phospho peptide (dark blue) or pervanadate and blocked with non-phospho peptide (purple) using Phospho-c-Cbl (Tyr700) antibody CblY700-E1 at 0.1 µg/mL.

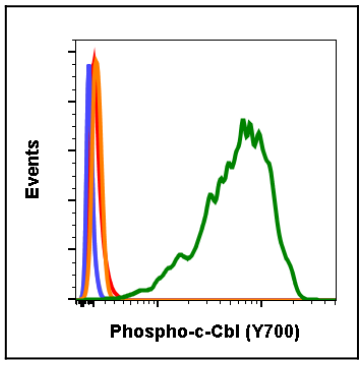


Fig-3: Flow cytometric analysis of HeLa cells, secondary antibody only negative control (blue) or treated with imatinib (grey) or with pervanadate (orange) using 0.1 µg/mL isotype control or imatinib (red) or pervanadate (green) using Phospho-c-Cbl (Tyr700) antibody CblY700-E1 at 0.1 µg/mL.

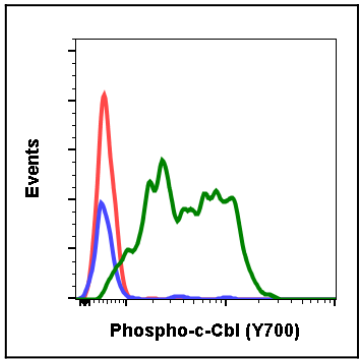


Fig-4: Flow cytometric analysis of 3T3 cells, secondary antibody only negative control (blue) or treated with imatinib (red) or pervanadate (green) using Phospho-c-Cbl (Tyr700) antibody CblY700-E1 at 0.01 µg/mL.