

Cbl-b (Casitas B-lineage lymphoma proto-oncogene-b), Full length

Cat. # UB308

Background:

Cbl-b is an E3 ligase which regulates a large number of different signaling molecules in the cell. The mammalian Cbl family of proteins is highly conserved throughout evolution from nematodes to humans and consists of c-Cbl, Cbl-b, and Cbl-3. All three members of the Cbl family of proteins share a highly homologous tyrosine kinase-binding (TKB) domain. The TKB domain is followed by a highly conserved helical linker (L) domain and a RING (really interesting new gene) finger (RF) domain, which bind to ubiquitin-conjugating enzymes (E2). In contrast, the C-terminal regions of this family of proteins are less conserved. Cbl-b has been demonstrated to play a crucial role in establishing the threshold for T-cell activation and controlling peripheral T-cell tolerance via multiple mechanisms.(1-3)

Product Information

Purity:	≥ 95% by SDS-PAGE
Molecular Weight:	110 kDa
Quantity:	25 µg
Physical State:	Liquid
Source:	Human Recombinant
Tag:	FLAG
Storage:	-80° C. Avoid repeated freeze/thaw cycles

References

1. Liu Q, Zhou H, Langdon WY, Zhang J. E3 ubiquitin ligase Cbl-b in innate and adaptive immunity. *Cell Cycle*. 2014;13(12):1875-84. doi: 10.4161/cc.29213. PubMed PMID: 24875217; PMCID: PMC4111751.
2. Lutz-Nicoladoni C, Wolf D, Sopper S. Modulation of Immune Cell Functions by the E3 Ligase Cbl-b. *Front Oncol*. 2015;5:58. doi: 10.3389/fonc.2015.00058. PubMed PMID: 25815272; PMCID: PMC4356231.
3. Zhou Z-R, Gao H-C, Zhou C-J, Chang Y-G, Hong J, Song A-X, Lin D-H, Hu H-Y. Differential ubiquitin binding of the UBA domains from human c-Cbl and Cbl-b: NMR structural and biochemical insights. *Protein Sci*. 2008;17(10):1805-14.

All products are for research use only • Not intended for human or animal diagnostic or therapeutic uses
Copyright © 2009 LifeSensors, Inc. All Rights Reserved