



## ***DB068: Cbl (C14)***

### **Background:**

The proto-oncogene c-Cbl was initially identified as the cellular homologue of v-Cbl oncogene that induces pre-B cell lymphomas and myeloid leukemias in mice (1&2). In more recent studies Cbl has been shown to be a negative regulator of tyrosine kinase signaling (2-4). The ubiquitin ligase activity of Cbl leads to the degradation of tyrosine kinases, thus attenuating the signal of receptors (3&4). Targets of Cbl include activated protein tyrosine kinases belonging to the Src and Syk/Zap-70 families (3). An additional mechanism to attenuate receptor signaling is thought to be achieved by Cbl's interaction with downstream targets of tyrosine kinases, such as PI-3K and Vav (1&3).

### **Origin:**

Cbl (C14) is provided as an affinity purified rabbit polyclonal antibody, raised against a peptide mapping to the carboxy terminal domain of human Cbl p120.

### **Product Details:**

Each vial contains 200 µg/ml of affinity purified rabbit IgG, Cbl (C14) DB068, in 1 ml PBS containing 0.1 % sodium azide and 0.2% gelatin.

### **Competition Studies:**

A blocking peptide is also available, DB068P, for use in competition studies. Each vial contains 100 µg of peptide in 0.5 ml PBS with 0.1% sodium azide and 100 µg BSA.

### **Specificity:**

Cbl (C14) is recommended to detect mouse, rat, and human Cbl by western blotting, immunoprecipitation, and immunohistochemistry. Recommended western blotting starting dilution 1:200.

### **Storage:**

Store this product at 4° C, do not freeze. The product is stable for one year from the date of shipment.

### **References:**

1. Liu YC, Altman A. 1998. Cbl: complex formation and functional implications. *Cell Signal* 10(6):377-385.
2. Miyake S, Lupper ML, Andoniou CE, Lill NL, Ota S, Douillard P, Rao N, Band H. 1997. The Cbl protooncogen product: from an enigmatic oncogene to center stage of signal transduction. *Crit Rev Oncog* 8(2-3):189-218.
3. Rao N, Dodge I, Band H. 2002. The Cbl family of ubiquitin ligases: critical negative regulators of tyrosine kinase signaling in the immune system. *J Leukoc Biol* 71(5):753-763.
4. Sanjay A, Horne WC, Baron R. 2001. The Cbl family: ubiquitin ligases regulating signaling by tyrosine kinase. *Sci STKE* 2001(110):PE40.

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