

**Catalog No. LF-MA0200**

**MONOCLONAL ANTIBODY**



## Anti- Bcl-2(11C5)

**Background :** Bcl-2 (B-cell lymphoma 2) family govern mitochondrial outer membrane permeabilization (MOMP) and can be either pro-apoptotic (Bax, BAD, Bak and Bok) or anti-apoptotic (Bcl-2, Bcl-xL, and Bcl-w). The mitochondrial release of cytochrome c through anion channel is regulated by Bcl-2 and Bcl-xL. The Bcl-2 family of proteins are key regulators of many signals leading to caspase, which when activated cause cellular destruction by cleaving a range of vital cellular substrates. The members of the Bcl-2 family share one or more of the four characteristic domains of homology entitled the Bcl-2 homology (BH) domains (named BH1, BH2, BH3 and BH4). The Bcl-2 gene has been implicated in a number of cancers, including melanoma, breast, prostate, and lung carcinomas, as well as schizophrenia and autoimmunity. It is also thought to be involved in resistance to conventional cancer treatment.

Apoptosis is an important component of the sequence of events during which anticancer drugs induce an antitumor response. The molecular mechanism for drug-induced apoptosis is associated with a mitochondrial dysfunction that is characterized by an increase in MOMP and a release of cytochrome c from mitochondria, indicating that Bcl-2 plays a critical role in anticancer drug-induced apoptosis.

**Immunogen :** Recombinant human protein purified from *E.coli* (His-Bcl-2)

**Host :** Mouse      **Clone number :** 11C5

**Isotype :** IgG2a, k      **Size :** 100 µl

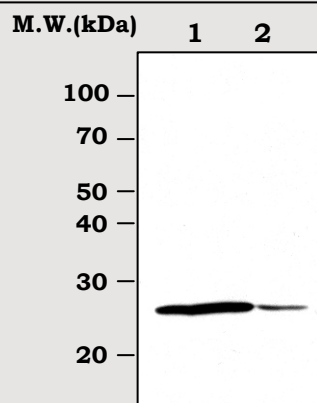
**Compositon :** Hepes with 0.15M NaCl, 0.01% BSA, 0.03% sodium azide, and 50% glycerol

**Positive control :** HL-60 cell lysate

**Storage :** Store for 1 year at -20°C from date of shipment

### Species cross reactivity

Human	Mouse	Rat
+	-	-



### Immunoblot Analysis of cell lysates

Lane 1 : HL-60 cell lysate

Lane 2 : Jurkat T cell lysate

### Applications :

ELISA

Western blotting (1: 2,000)

Immunoprecipitation (0.5 µl/400 µl cell lysates)

### Background Reference :

- 1)Zinkel S, Gross A and Yang E, 2006, Cell Death Differ. 13(8):1351-1359
- 2)Kim R, Emi M, Tanabe K and Toge T., 2004, Cancer. 101(11):2491-2502
- 3)Willis S, Day CL, Hinds MG and Huang DC., 2003, J Cell Sci. 116(Pt 20):4053-4056.