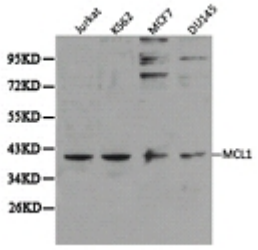
E90250

MCL1Polyclonal Antibody

Catalog Number: E90250
Amount: 100ul
Background: Mcl-1 is an anti-apoptotic member of the Bcl-2 family originally isolated from the ML-1 human myeloid leukemia cell line during phorbol ester-induced differentiation along the monocyte/macrophage pathway (1). Similar to other Bcl-2 family members, Mcl-1 localizes to the mitochondria (2), interacts with and antagonizes pro-apoptotic Bcl-2 family members (3), and inhibits apoptosis induced by a number of cytotoxic stimuli (4). Mcl-1 differs from its other family members in its regulation at both the transcriptional and post-translational level. First, Mcl-1 has an extended amino-terminal PEST region, which is responsible for its relatively short half-life (1,2). Second, unlike other family members, Mcl-1 is rapidly transcribed via a PI3K/Akt dependent pathway, resulting in its increased expression during myeloid differentiation and cytokine stimulation (1,5-7). Mcl-1 is phosphorylated in response to treatment with phorbol ester, microtubule-damaging agents, oxidative stress, and cytokine withdrawal (8-11). Phosphorylation at Thr163, the conserved MAP kinase/ERK site located within the PEST region, slows Mcl-1 protein turnover (10) but may prime the GSK-3 mediated phosphorylation at Ser159 that leads to Mcl-1 destabilization (11). Mcl-1 deficiency in mice results in peri-implantation lethality (12). In addition, conditional disruption of the corresponding mcl-1 gene shows that Mcl-1 plays an important role in early lymphoid development and in the maintenance of mature lymphocytes (13).
Species: Rabbit
Isotype: IgG
Storage/Stability: Store at -20oC or -80oC. Avoid freeze / thaw cycles. Buffer: PBS with 0.02% sodium azide, 50% glycerol, pH7.3.
Synonyms: MCL1;BCL2L3;EAT;MCL1L;MCL1S;MGC104264;MGC1839;Mcl-1;TM ;
Immunogen: C term -peptideof human MCL1
Purification: Affinity purification
Reactivity: H M R
Applications: WB
Molecular Weight: 37kDa
Swiss-Prot No. : Q07820
Gene ID: 4170
References: 1. Kozopas, K.M. et al. (1993) Proc Natl Acad Sci USA 90, 3516-20. 2. Yang, T. et al. (1995) J Cell Biol 128, 1173-84. 3. Sato, T. et al. (1994) Proc Natl Acad Sci USA 91, 9238-42. 4. Zhou, P. et al. (1997) Blood 89, 630-43. 5. Wang, J.M. et al. (1999) Mol Cell Biol 19, 6195-206. 6. Jourdan, M. et al. (2003) Oncogene 22, 2950-9. 7. Chao, J.R. et al. (1998) Mol Cell Biol 18, 4883-98. 8. Domina, A.M. et al. (2000) J Biol Chem 275, 21688-94. 9. Inoshita, S. et al. (2002) J Biol Chem 277, 43730-4. 10. Domina, A.M. et al. (2004) Oncogene 23, 5301-15. 11. Maurer, U. et al. (2006) Mol Cell 21, 749-60. 12. Rinkenberger, J.L. et al. (2000) Genes Dev 14, 23-7. 13. Opferman, J.T. et al. (2003) Nature 426, 671-6.

For Research Use Only

WB 1:500 - 1:2000



Western blot analysis of extracts of various cell lines, using MCL1 antibody.

For Research Use Only