MONOCLONAL ANTIBODY



Anti-Gelsolin(35B2)

Background: Gelsolin superfamily proteins control actin organization by severing filaments, capping filament ends and nucleating actin assembly. Gelsolin, a protein of 82-84 kDa, is the founding member of this family, which now contains at least another six members: villin, adseverin, capG, advillin, supervillin and flightless I. Gelsolin exists as a cytoplasmic as well as a plasma isoform, and can bind, sever and cap actin filaments. Plasma gelsolin level decreases dramatically as a result of major trauma and reinfusion of gelsolin can protect against lung damage associated with major burn injury and other types of insults. Recent study in Fas antibody-induced liver failure suggests that gelsolin exerts an overall antiapoptotic effect in vivo. Gelsolin, a marker of motility, could be applied as a biomarker in assessing tumor prognosis. Tumor-associated processes such as invasion and metastasis are known to be critically dependent on dynamic alterations in the organization of the actin cytoskeleton. A causal relationship between gelsolin expression and in vitro invasion by way of signaling through Ras has been reported.

Immunogen: Protein purified from

Human plasma **Host**: Mouse

Clone number: 35B2

Isotype : IgG1, k

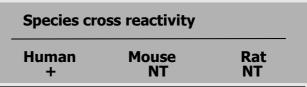
Size: $100 \mu \ell$

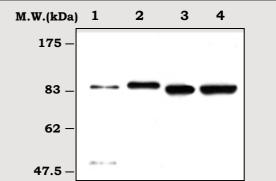
Compositon: Hepes with 0.15 M NaCl, 0.01% BSA, 0.03% sodium azide, and 50%

glycerol

Positive control: Human plasma

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





Immunoblot Analysis of human plasma

protein and cell lysates

Lane 1: Gelsolin isolated from human

plasma

Lane 2 : Human plasma

Lane 3: NIH:OVCAR-3 cell lysate

Lane 4: MCF-7 cell lysate

Applications:

Western Blotting(1: 2,000)

Immunoprecipitation (0.5 $\mu \ell / 400 \mu \ell$ cell lysates)

Background Reference:

- 1) Leifeld, L. et al., 2006, Am J Pathol.168:778-785
- 2) Yang, J. et al., 2006, BMC Cancer. 6:203
- 3) Silacci, P. et al., 2004, Cell Mol Life Sci. 61:2614-2623
- 4) Christofidou-Solomidou M. et al., 2002, Lung 180: 91_104
- 5) De Corte, V. t al., 2002, EMBO J. 21:6781-6790

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