Catalog No. LF-MA0101

MONOCLONAL ANTIBODY

Anti-Heat Shock Protein 70 (16A12)

Background : The Heat shock protein 70(HSP70) family was found in many intracellular compartments. Members of this protein occur in chloroplasts, endoplasmic reticulum, mitochondria, and cytosol. These proteins are induced by a variety of biological stresses, including heat stress, in every organism. HSP70 serves a variety of roles: 1) It acts as molecular chaperones facilitating the assembly of multi-protein complexes, 2) It participates in the translocation of polypeptides across cell membranes and to the nucleus 3) It aids in the proper folding of nascent polypeptide chains. HSP70 is mitochondrial import machinery and plays key roles in the cytosolic endoplasmic reticulum. Recently, extracellular localized HSP have been found to play key roles in the induction of a cellular immune response.

Immunogen : Recombinant Human HSP70 protein purified *E.coli*

Host : Mouse

Clone number : 16A12

Isotype : IgG2b, λ

Size : 100 µℓ

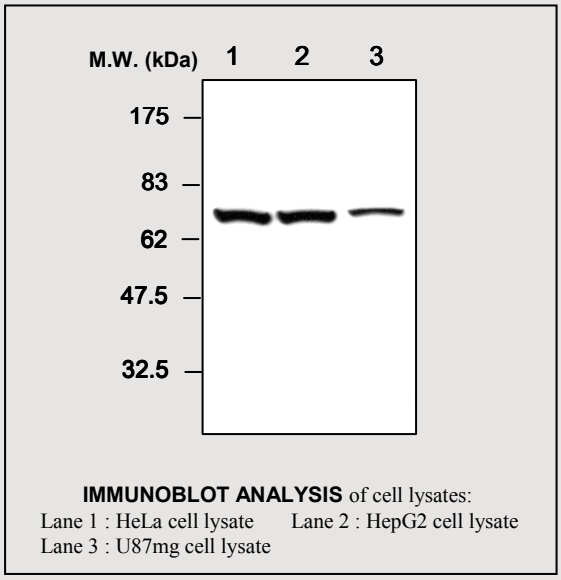
Composition : PBS containing 50% glycerol

Positive control : HeLa 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 : HeLa cell lysate Lane 2 : HepG2 cell lysate
Lane 3 : U87mg cell lysate

Applications :
ELISA
Western Blotting (1:2000)
Immunoprecipitation (1-2 µℓ/400 µℓ cell lysates)
Immunohistochemistry

Background Reference :

1) Multhoff G, et al. (2002) *Int J Hyperthermia.* **18**(6):576-85
2) Martin J, et al.(1992) *Science* **258**(5084):995-8
3) Hatayama T, et al.(1992) *J Biochem* 111(4): 484-90
4) Haas IG. (1995) *FEBS Lett.* (1995) **369**(1):72-5

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