

Hsp70/Hsc70 (Plant) Monoclonal Antibody

ORDERING INFORMATION

Catalog No.: 11138 (clone 5G1-95)
Size: 100ug in PBS (1mg/ml), pH 7.4,
50% glycerol, 0.09% sodium azide.
Purified by Protein G affinity
chromatography.

BACKGROUND

Hsp70 genes encode heat-inducible 70kDa heat shock proteins. Hsp70 binds ATP with high affinity and possesses weak ATPase activity which can be stimulated by binding to unfolded proteins and synthetic peptides. The structure of the ATP binding domain displays multiple features of nucleotide binding proteins. The binding of ATP triggers a critical conformational change which leads to the release of the bound substrate protein. The universal ability of Hsp70s to undergo cycles of binding to and release from partially unfolded proteins is the basis of their role in protein synthesis, protein folding, oligomerization, and protein transport.

SPECIFICATION SUMMARY

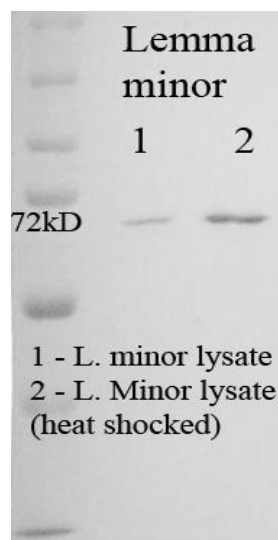
Antigen: Purified Hsp70 from *Phaseolus aureus* (mung bean).
Host Species: Mouse
Antibody Class: IgG1

SPECIFICITY

This antibody recognizes constitutive and inducible plant Hsp70. It does not cross-react with human, rat, bacteria (DNAKK) or human BIP.

APPLICATIONS

Immunoblotting: use at 1ug/ml. A band of ~70kDa is detected.



Western blot detection of Hsp70 in Duckweed (L.minor) cells with #11138.

ELISA: use at 1-10ug/ml.

These are recommended concentrations; enduser should determine optimal concentrations for their applications.

DILUTION INSTRUCTIONS

Dilute in PBS or medium which is identical to that used in the assay system.

STORAGE AND STABILITY

This antibody is stable for at least one (1) year at -20°C. Avoid repeated freeze-thaw cycles.

For in vitro investigational use only. Not intended for diagnostic or therapeutic applications.