

Technical Data Sheet

Purified Mouse Anti-Hsp70

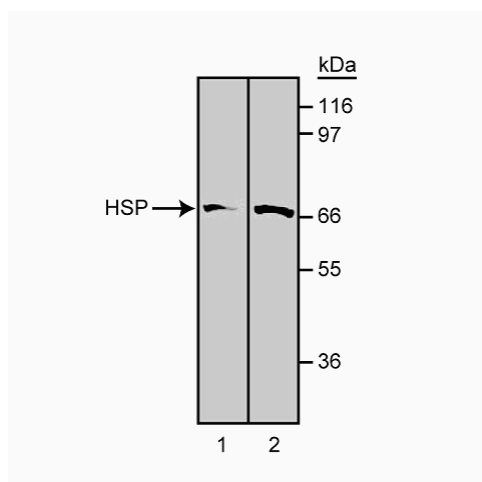
Product Information

Material Number:	554243
Size:	0.1 mg
Concentration:	0.5 mg/ml
Clone:	5G10
Immunogen:	Purified Hsp70
Isotype:	Mouse IgG2b
Reactivity:	QC Testing: Human
Target MW:	70 kDa
Storage Buffer:	Aqueous buffered solution containing ≤0.09% sodium azide.

Description

Cells from many organisms increase the expression of heat shock or stress proteins in response to adverse changes. The heat shock protein (HSP) 70 family consists of multiple members, localized within different intracellular compartments. HSP 70 is constitutively expressed in many human cells with increased expression observed following stress. Members of the HSP 70 family bind ATP, and are thought to function as molecular chaperones by assisting in the folding of other proteins in various intracellular compartments. HSP 70 migrates at a molecular weight of 70 kDa in SDS-PAGE.

The 5G10 antibody recognizes human HSP 70. Purified HSP 70 was isolated from K562, a human erythroid cell line, and used as immunogen.



Western blot analysis of HSP-70 using clone 5G10 (Cat. No 554253). HSP-70 was constitutively expressed (lane 1) in HeLa cells and increased approximately four fold after a heat shock treatment at 42°C for 60 minutes (lane 2).

Preparation and Storage

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.

Store undiluted at 4°C.

Application Notes

Application

Western blot	Routinely Tested
Immunoprecipitation	Tested During Development

Recommended Assay Procedure:

Western blot: Please refer to http://www.bdbiosciences.com/pharmingen/protocols/Western_Blotting.shtml. HeLa cervical carcinoma cells (ATCC CCL-2) are suggested as a positive control.

Suggested Companion Products

Catalog Number	Name	Size	Clone
611449	HeLa Cell Lysate	500 µg	(none)
554002	HRP Goat Anti-Mouse Ig	1.0 ml	(none)

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Product Notices

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
2. Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.
3. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing.

References

- Craig EA, Gross CA. Is hsp70 the cellular thermometer. *Trends Biochem Sci.* 1991; 16(4):135-140.(Biology)
- Cyr DM, Langer T, Douglas MG. DnaJ-like proteins: molecular chaperones and specific regulators of Hsp70. *Trends Biochem Sci.* 1994; 19(4):176-181.(Biology)
- Singh MK, Yu J. Accumulation of a heat shock-like protein during differentiation of human erythroid cell line K562. *Nature.* 1984; 309(5969):631-633.(Immunogen)