



Hip (h2): 293T Lysate: sc-117338

BACKGROUND

The HSP 70 family is comprised of four highly conserved proteins: HSP 70, HSC 70, GRP 75 and GRP 78. These proteins serve a variety of functions as molecular chaperones and aid in the assembly of multi-protein complexes. In addition to these specialized functions, the HSP 70 family may play a more general role in stabilizing protein conformation and preventing protein aggregation. HSC 70 in the mitochondrial and endoplasmic reticulum acts as ATP-driven, force-generating motors that translocate proteins across organelle membranes. An HSC 70-interacting protein designated Hip, has been identified as a cochaperone in the HSC 70/HSP 40 reaction cycle. One Hip oligomer binds the ATPase domains of at least two HSC 70 molecules. This association is dependent on the activation of the HSC 70 ATPase by HSP 40. Hip functions to stabilize HSC 70 in the ADP-bound state which has high affinity for substrate protein. Through its own chaperoning activity, Hip may contribute to the substrate specificity of the HSC 70 complex.

REFERENCES

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6. Csermely, P., Miyata, Y., Schneider, T. and Yahara, I. 1995. Autophosphorylation of GRP 94 (endoplasmic reticulum chaperone). *J. Biol. Chem.* 270: 6381-6388.
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CHROMOSOMAL LOCATION

Genetic locus: ST13 (human) mapping to 22q13.2.

PRODUCT

Hip (h2): 293T Lysate represents a lysate of human Hip transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

APPLICATIONS

Hip (h2): 293T Lysate is suitable as a Western Blotting positive control for human reactive Hip antibodies. Recommended use: 10-20 µl per lane.

Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.