

## 3T3 Cell Lysate (Heat Shocked)

### Product Specifications

<b>Catalog Number:</b>	LYC-3T101
<b>Source:</b>	Mouse Fibroblast
<b>Application:</b>	WB Control 20 µg/Lane recommended <i>Optimal quantity for a specific application must be determined by the investigator</i>
<b>Concentration:</b>	2.0 mg/mL
<b>Format:</b>	Shipped in SDS-PAGE sample buffer (40 mM Tris-HCl, pH. 8.8, 1% SDS, 50 mM DTT, 7.5% glycerol, 0.003% Bromophenol Blue), heated for 10 min at 70°C
<b>Storage:</b>	Store at -70°C <i>Shipping conditions may differ from the recommended storage temperature. Avoid repeated freeze/thaw cycles. Recommended shelf life from date of receipt is 6 months.</i>
<b>Related Products:</b>	
LYC-3T100	3T3 Cell Lysate
<b>NEW!</b> LYC-A4100	A431 Cell Lysate

### Production Method:

3T3 cells were maintained in Dulbecco's modified Eagle's medium with 4 mM L-glutamine adjusted to contain 1.5 g/L sodium bicarbonate and 4.5 g/L glucose, 90%; bovine calf serum, 10%. 3T3 cells were heat shocked at 44°C for 2 hours and allowed to recover for five to eighteen hours at 37°C before harvesting. Cells were collected from media by centrifuging at 1200 rpm at 4°C in a Beckman GS-6R centrifuge for 7 minutes. Cells were washed twice in PBS and were lysed in M-PER Mammalian Protein Extraction Reagent (Pierce catalog# 78501) with a protease inhibitor cocktail. The cell lysate was adjusted to 2mg/mL in SDS PAGE sample buffer (40 mM Tris-HCl pH 6.8, 1% SDS, 50 mM DTT, 7.5% glycerol, 0.003% bromophenol blue) and heated for 10 min at 70°C.

### Background:

The 3T3 cell line is a spontaneously immortalized mouse fibroblast cell line established from Swiss mouse embryonic tissue<sup>1</sup>. Cellular stressors such as heat shock and oxidative stress result in the activation of heat shock protein gene expression by transcriptional regulators such as HSF1<sup>2</sup>. Heat shock proteins play an important role in both normal cellular homeostasis as well as cell survival during and after cellular stress<sup>3-4</sup>.

### References:

1. Todaro, G.J. and Green, H. (1963) J Cell Biol. **17**, 299-313.
2. Ahn, S.G., Thiele, D.J. (2003) Genes & Dev. **17**, 516-528.
3. Pirkala, L., et al. (2001) FASEB J. **15**, 1118-1131.
4. Jolly, C. and Morimoto, R.I. (2000) J Natl Cancer Inst. **92**, 1564-1572.

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