

Positive Control Lysate for Heat Shock Factor 1 Ab-1

Human Cells-17 Lysate

Cat. #RT-405-PCL (250 µg in 0.1 ml) (Ready-To-Use for Western Blotting)

Please note this data sheet has been changed effective December 19, 2011

Specificity and Comments:

Human cells-17 has a high level expression of Heat Shock Factor 1 (HSF1) protein. **NEOMARKERS'** Ab-1 shows a single band at 75kDa on this positive control cell lysate. HSF1 is a protein of 70kDa-85kDa (depending upon the source and state of cells). The synthesis of heat shock proteins is dependent on transcriptional and post-transcriptional control in eukaryotic cells. The regulation of heat shock gene transcription is mediated by the transcriptional activator, Heat Shock Factor (HSF), which binds to heat shock response elements (HSEs). At least three HSFs have been isolated from the human, mouse, chicken, and tomato genomes and an additional factor, HSF4 has been identified in humans. HSFs purified from yeast, *Drosophila*, and human have different molecular weights and do not cross-react immunologically. These factors are activated by distinct stimuli. HSF1 responds to cellular stress signals such as heat, heavy metals, and oxidative reagents whereas, the HSF2 is activated during differentiation. Some laboratories have reported that the constitutive, non-DNA binding, monomeric form of inactive HSF1 is located in the cytoplasm. Upon activation, HSF1 is trimerized and is localized in nucleus where it binds DNA..

Supplied As:

250µg of total protein cell lysate in 0.1ml of 1X PAGE-sample buffer containing DTT.

Known Applications:

- Western Blotting (Use **NEOMARKERS'** Ab-1)
[Load 20ul of the positive control cell lysate onto one lane of mini-gel.]

Storage and Stability:

Store vial below 0°C. When stored below 0°C, this lysate is stable for 12 months.

Limitations and Warranty:

Our products are intended FOR RESEARCH USE ONLY and are not approved for clinical diagnosis, drug use or therapeutic procedures. No products are to be construed as a recommendation for use in violation of any patents. We make no representations, warranties or assurances as to the accuracy or completeness of information provided on our data sheets and website. Our warranty is limited to the actual price paid for the product. NeoMarkers is not liable for any property damage, personal injury, time or effort or economic loss caused by our products.

NEOMARKERS' Other Related Products:

Abs: HSF1 (10H4, 10H8), HSF2 (3E2), HSP27 (G3.1), HDJ-2/DNAJ (KA2A5.6), HSP70 (W27, BRM22), HSP84, HSP86, Grp94 (9G10.F8.2), Ku (J15, 111, 162, N3H10, S5C11, N9C1, S10B1), DNA-PKcs (18-2, 25-4, 42-psc).

Material Safety Data:

This product is not licensed or approved for administration to humans or to animals. Standard Laboratory Practices should be followed when handling this material. The chemical, physical, and toxicological properties of this material have not been thoroughly investigated. Appropriate measures should be taken to avoid skin and eye contact, inhalation, and ingestion.

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