

HeLa Cell Nuclear Extract

Catalog Number: AG1012-200
Unit Size: 200ug

Description The HeLa cell line was derived from a fatal cervical carcinoma. The HeLa genome was created by horizontal gene transfer from human papillomavirus 18 (HPV18) to human cervical cells. The genome is different from either parent genome, including the number of chromosomes. HeLa cells have a modal chromosome number of 82, with 4 copies of chromosome 12 and 3 copies of chromosomes 6, 8, and 17. These cells proliferate abnormally rapidly, even compared to other cancer cells. HeLa cells have an active version of the enzyme telomerase during cell division, which prevents the incremental shortening of telomeres that is implicated in aging and eventual cell death. The cells allow for episomal amplification of transfected plasmids and extended temporal expression of the desired gene products.

Source *Mammalian cell*

Protein Concentration ≥6mg/ml

Biological Activity The HeLa-nuclear extract was prepared as described by Dignam et al (1) and Manley et al (2), and is ideal for in vitro transcription, splicing, protein-protein interactions and other related function assays.

Formulation 20mM Tris-Cl (pH7.9), 100mM KCl, 20% Glycerol, 1mM DTT and 0.5mM EDTA.

Storage and Handling The extract should be stored at -80°C and defrosted immediately before use. It can be stored at -80°C for up to 12 months without detectable loss of activity. Always avoid repeated freeze-thaw cycles.

References
1. Dignam, J.D., et al., (1983) Nucleic Acids Res. 11, 1475-1489
2. Manley, J.L., et al., (1980) Proc. Natl. Acad. Sci. USA 77, 5706-5710

FOR RESEARCH USE ONLY!!!