G-Biosciences, St Louis, MO. USA ♦ 1-800-628-7730 ♦ 1-314- 991-6034 ♦ technical@GBiosciences.com

*Gen*Lysate™

Tissue / Cell Lysate of Total Proteins

INTRODUCTION

*Gen*Lysate™ is tissue or cell lysate total proteins, extracted from tissue/cells of interest and is ready to use for SDS-PAGE and Western blotting purposes. The total proteins are being extracted from whole tissue or cells following the method of Laemmli, U.K. *(Nature, 1970, 227: 680-685).* The proteins are extracted in a denaturing buffer containing 62mM TrisHCl and 2% SDS with a protease inhibitor cocktail to minimize proteolytic damage to proteins.

COMPONENTS

1 Tube containing 150µg total proteins (***lyophilized***) from tissue/cell as per specification

SPECIFICATIONS

***Gen*Lysate™ Description:** Rat Normal Brain Thalamus **Catalog #:** SLR-0212

Protein Quantity: 150µg

Volume/Concentration: Reconstitute the supplied lyophilized protein in 30µl DI water to give 5µg/µl protein concentration.

STORAGE & STABILITY

GenLysate™ is shipped in Blue Ice and should be stored at -20°C upon arrival. Stable for 1 year if stored as recommended.

Note: *After reconstitution, the GenLysate™ must be stored at -70°C.*

PROTOCOL

1. Briefly spin the tube containing GenLysate™ and reconstitute in 30µl de-ionized water to give 5µg/µl concentration.
2. Add an appropriate volume of sample buffer containing a reducing agent (e.g. 5% β–mercaptoethanol or 5-20mM DTT final concentration) in the reconstituted GenLysate tube.
3. The GenLysate™ may also be diluted if needed with an appropriate sample buffer containing a reducing agent.
4. Before loading the sample on the gel, put the tube in a boiling water bath for approx 5 minutes and briefly spin it again. Vortex the tube and the sample is now ready for loading on to the gel.

Important Note*: Avoid frequent thawing and freezing of the GenLysate™. It is recommended to make appropriate aliquots of lysate after reconstitution and then freeze them at -70°C.*

CERTIFICATE OF ANALYSIS

The protein concentration of GenLysate™ samples was measured using NI™-Protein Assay *(G-Biosciences Cat # 786-005)* with BSA as a standard. The lysate was run on a 4-20% polyacrylamide gel and after electrophoresis the gel was stained with RapidStain™ *(G-Biosciences Cat. # 786-31).* The protein bands were sharp and well resolved and there was no smear *(proteins from 200kd to 5kd were visible).* When appropriate, the protein lysates are also tested by Western blot analysis - protein transfer blots are probed for the presence of actin or tubulin, etc.

Product Warranty: *GenLysates™ are warranted to perform at least once using kits and reagents from G-Biosciences.*

Related Products:

1. femtoLUCENT™-A Chemiluminescence Detection System (Cat # 786-10): *Based on isoluminol-HRP-chemiluminescence reaction, which allows detection of sub-pico gram quantity of antigens with lower background.*

2. Ready-to-Screen Tissue Blots for Western Analysis*: Geno Tech has put together pre-made Ready-to-Screen Tissue Blots of total proteins extracted from hard-to-obtain tissues from human (normal, tumor and region specific), mouse, rat, and cell lines etc. (For details please visit our web site at www.GBiosciences.com).*



3. Western Re-Probe™ (Cat # 786-119): *Western Re-Probe (5X) kit provides buffer for stripping and re-probing western blot membranes.*

4. NAP-Blocker™ (Cat # 786-190)*: NAP-Blocker™, supplied in 2X concentration, is a blocking agent containing non-animal proteins for improved assay sensitivity, clean background and a high signal to background ratio. Simple to use and better results than milk powder preparation as it ensures uniform blocking without non-specific binding.*

5. Pre-Diluted Protein Standard (Cat # 786-114)*: BSA protein standard in an easy -to-use pre-diluted form, supplied as 6x5ml standard ranging from 0.1-1mg/ml.*

6. RapidStain™ (Cat # 786-31)*: For staining proteins in the gel, which is based on colloidal properties of Coomassie Blue. RapidStain only stains protein leaving clear background, which results in maximum visibility of bands. Sensitivity of RapidStain is in nanogram quantity of proteins (up to 10ng).*

7. FASTsilver™ (Cat # 786-30): *For staining of proteins and nucleic acids in the gel, which detects up to 1ng protein/band. Staining takes place in as little as 60 minutes and produces sharp bands without any background staining.*

8. Minute Reversible Stain™ (Cat # 786-32)*: 5 Minute Reversible Stain uses a single step protocol for staining protein bands in SDS-PAGE gels. No de-staining is necessary to see the protein bands. It is suitable for work requiring transfer and elution of protein bands from gels.*

9. Blot-FastStain™ (Cat # 786-34)*: For reversible staining of protein on transfer membranes, which stains only protein leaving the background absolutely untouched (brilliant white) leading to exceptional band visibility. Detects as low as 3ng BSA.*

10. NI Protein Assay Kit™ (Cat # 786-005): *A protein assay that is free from interference of common laboratory agents including reducing agents, detergents, dyes, EDTA etc.*

Note: For other related products, visit our web site at **www.GBiosciences.com** or contact us.

Rev 11.17.08-SA/MM/IA