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A Geno Technology, Inc. (USA) brand name

# Mammalian GenLysates™

## Lyophilized Protein Lysates

(Cat. # See Appendix)



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## INTRODUCTION

GenLysates™ are ready-to-use total protein extracts from a wide selection of tissues and cells. The GenLysates™ are ideal for SDS-PAGE and Western blot analysis. The total proteins extraction was performed according to Laemmli<sup>1</sup>. The proteins are extracted in a denaturing buffer containing 62mM Tris.HCl and 2% SDS with a protease inhibitor cocktail to minimize proteolytic damage to proteins.

## ITEM(S) SUPPLIED

| Description | Size          |
|-------------|---------------|
| GenLysate™  | 150µg protein |

*See Appendix for catalog number and product description.*

## STORAGE & STABILITY

GenLysates™ are shipped on 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 deionized 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.

**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 5-200kD 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.

## PRODUCT WARRANTY:

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

## APPENDIX: MAMMALIAN GENLYSATES™

| Cat. #               | Region                | Species | Tissue Type |
|----------------------|-----------------------|---------|-------------|
| <b>Brain Lysates</b> |                       |         |             |
| NLH-02               | Whole                 | Human   | Normal      |
| SLH-026              | Cerebellum            | Human   | Normal      |
| SLH-025              | Frontal Cortex        | Human   | Normal      |
| SLH-024              | Hippocampus           | Human   | Normal      |
| SLH-023              | Medulla               | Human   | Normal      |
| SLH-0210             | Mid Brain             | Human   | Normal      |
| SLH-029              | Olfactory Lobe        | Human   | Normal      |
| SLH-021              | Pons                  | Human   | Normal      |
| SLH-0211             | Posterior Cortex      | Human   | Normal      |
| SLH-028              | Striatum              | Human   | Normal      |
| SLH-0213             | Temporal Lobe         | Human   | Normal      |
| SLH-0212             | Thalamus              | Human   | Normal      |
| NLM-02               | Whole                 | Mouse   | Normal      |
| SLM-026              | Cerebellum            | Mouse   | Normal      |
| SLM-022              | Entorhinal Cortex     | Mouse   | Normal      |
| SLM-025              | Frontal Cortex        | Mouse   | Normal      |
| SLM-024              | Hippocampus           | Mouse   | Normal      |
| SLM-023              | Medulla               | Mouse   | Normal      |
| SLM-0210             | Mid Brain             | Mouse   | Normal      |
| SLM-029              | Olfactory Lobe        | Mouse   | Normal      |
| SLM-021              | Pons                  | Mouse   | Normal      |
| SLM-0211             | Posterior Cortex      | Mouse   | Normal      |
| SLM-028              | Striatum              | Mouse   | Normal      |
| SLM-0212             | Thalamus              | Mouse   | Normal      |
| PBL-09               | Amygdala              | Macaque | Normal      |
| PBL-14               | Cingulate Gyrus       | Macaque | Normal      |
| PBL-08               | Cerebellum            | Macaque | Normal      |
| PBL-13               | Frontal Cortex        | Macaque | Normal      |
| PBL-04               | Hippocampus           | Macaque | Normal      |
| PBL-06               | Hypothalamus          | Macaque | Normal      |
| PBL-10               | Medulla               | Macaque | Normal      |
| PBL-11               | Occipital Lobe        | Macaque | Normal      |
| PBL-12               | Parahippocampal Gyrus | Macaque | Normal      |
| PBL-15               | Parietal Lobe         | Macaque | Normal      |
| PBL-16               | Pituitary             | Macaque | Normal      |

| Cat. #                      | Region            | Species | Tissue Type |
|-----------------------------|-------------------|---------|-------------|
| PBL-05                      | Pons              | Macaque | Normal      |
| PBL-03                      | Striatum          | Macaque | Normal      |
| PBL-07                      | Temporal Lobe     | Macaque | Normal      |
| PBL-02                      | Thalamus          | Macaque | Normal      |
| NLR-02                      | Whole             | Rat     | Normal      |
| SLR-026                     | Cerebellum        | Rat     | Normal      |
| SLR-022                     | Entorhinal Cortex | Rat     | Normal      |
| SLR-025                     | Frontal Cortex    | Rat     | Normal      |
| SLR-024                     | Hippocampus       | Rat     | Normal      |
| SLR-023                     | Medulla           | Rat     | Normal      |
| SLR-0210                    | Mid Brain         | Rat     | Normal      |
| SLR-029                     | Olfactory Lobe    | Rat     | Normal      |
| SLR-021                     | Pons              | Rat     | Normal      |
| SLR-0211                    | Posterior Cortex  | Rat     | Normal      |
| SLR-028                     | Striatum          | Rat     | Normal      |
| SLR-0212                    | Thalamus          | Rat     | Normal      |
| <b>Breast Lysates</b>       |                   |         |             |
| NLH-13                      | Whole             | Human   | Normal      |
| TLH-13                      | Whole             | Human   | Tumor       |
| <b>Cervix Lysates</b>       |                   |         |             |
| NLH-17                      | Whole             | Human   | Normal      |
| TLH-17                      | Whole             | Human   | Tumor       |
| <b>Colon Muscle Lysates</b> |                   |         |             |
| NLH-20                      | Whole             | Human   | Normal      |
| TLH-20                      | Whole             | Human   | Tumor       |
| <b>Esophagus Lysate</b>     |                   |         |             |
| NLH-22                      | Whole             | Human   | Normal      |
| <b>Eye Lysates</b>          |                   |         |             |
| NLB-10                      | Whole             | Rabbit  | Normal      |
| SLB-1003                    | Aqueous Humor     | Rabbit  | Normal      |
| SLB-1002                    | Cornea            | Rabbit  | Normal      |
| SLB-1001                    | Retina            | Rabbit  | Normal      |
| NLR-10                      | Whole             | Rat     | Normal      |
| SLR-1003                    | Aqueous Humor     | Rat     | Normal      |
| SLR-1002                    | Cornea            | Rat     | Normal      |
| SLR-1001                    | Retina            | Rat     | Normal      |

| Cat. #                     | Region             | Species | Tissue Type |
|----------------------------|--------------------|---------|-------------|
| <b>Heart Lysates</b>       |                    |         |             |
| NLH-08                     | Whole              | Human   | Normal      |
| SLH-087                    | Aorta              | Human   | Normal      |
| SLH-088                    | Atrium (Left)      | Human   | Normal      |
| SLH-089                    | Atrium (Right)     | Human   | Normal      |
| SLH-090                    | Vena Cava          | Human   | Normal      |
| SLH-081                    | Ventricle (Left)   | Human   | Normal      |
| SLH-082                    | Ventricle (Right)  | Human   | Normal      |
| NLM-08                     | Whole              | Mouse   | Normal      |
| ML-10                      | Whole              | Pig     | Normal      |
| SLP-087                    | Aorta              | Pig     | Normal      |
| SLP-085                    | Aortic Valve       | Pig     | Normal      |
| SLP-083                    | Mitral Valve       | Pig     | Normal      |
| SLP-084                    | Pulmonary Valve    | Pig     | Normal      |
| SLP-086                    | Tricuspid Valve    | Pig     | Normal      |
| SLP-081                    | Ventricle (Left)   | Pig     | Normal      |
| SLP-082                    | Ventricle (Right)  | Pig     | Normal      |
| NLB-08                     | Whole              | Rabbit  | Normal      |
| NLR-08                     | Whole              | Rat     | Normal      |
| <b>Hypopharynx Lysates</b> |                    |         |             |
| NLH-15                     | Whole              | Human   | Normal      |
| TLH-15                     | Whole              | Human   | Tumor       |
| <b>Kidney Lysates</b>      |                    |         |             |
| NLH-04                     | Whole              | Human   | Normal      |
| NLM-04                     | Whole              | Mouse   | Normal      |
| SLM-042                    | Cortex             | Mouse   | Normal      |
| SLM-041                    | Medulla            | Mouse   | Normal      |
| NLB-04                     | Whole              | Rabbit  | Normal      |
| NLR-04                     | Whole              | Rat     | Normal      |
| SLR-042                    | Cortex             | Rat     | Normal      |
| SLR-041                    | Medulla            | Rat     | Normal      |
| <b>Liver Lysates</b>       |                    |         |             |
| NLH-01                     | Whole              | Human   | Normal      |
| TLH-01                     | Whole              | Human   | Tumor       |
| ML-05                      | Whole              | Macaque | Normal      |
| NLM-01                     | Whole              | Mouse   | Normal      |
| CFM-014                    | Smooth ER Fraction | Mouse   | Normal      |
| CFM-013                    | Rough ER Fraction  | Mouse   | Normal      |
| CFM-012                    | Nuclear Fraction   | Mouse   | Normal      |
| CFM-011                    | Mitochondria       | Mouse   | Normal      |
| CFM-015                    | Golgi Complex      | Mouse   | Normal      |

| Cat. #                         | Region | Species | Tissue Type |
|--------------------------------|--------|---------|-------------|
| ML-07                          | Whole  | Pig     | Normal      |
| NLB-01                         | Whole  | Rabbit  | Normal      |
| NLR-01                         | Whole  | Rat     | Normal      |
| <b>Lung Lysates</b>            |        |         |             |
| NLH-03                         | Whole  | Human   | Normal      |
| TLH-03                         | Whole  | Human   | Tumor       |
| NLM-03                         | Whole  | Mouse   | Normal      |
| NLB-03                         | Whole  | Rabbit  | Normal      |
| NLR-03                         | Whole  | Rat     | Normal      |
| <b>Ovary Lysates</b>           |        |         |             |
| NLH-07                         | Whole  | Human   | Normal      |
| TLH-07                         | Whole  | Human   | Tumor       |
| NLM-07                         | Whole  | Mouse   | Normal      |
| NLR-07                         | Whole  | Rat     | Normal      |
| <b>Pancreas Lysates</b>        |        |         |             |
| NLH-09                         | Whole  | Human   | Normal      |
| TLH-09                         | Whole  | Human   | Tumor       |
| NLM-09                         | Whole  | Mouse   | Normal      |
| NLR-09                         | Whole  | Rat     | Normal      |
| <b>Prostate Lysates</b>        |        |         |             |
| NLH-14                         | Whole  | Human   | Normal      |
| TLH-14                         | Whole  | Human   | Tumor       |
| <b>Rectum Lysates</b>          |        |         |             |
| NLH-16                         | Whole  | Human   | Normal      |
| TLH-16                         | Whole  | Human   | Tumor       |
| <b>Skeletal Muscle Lysates</b> |        |         |             |
| NLH-21                         | Whole  | Human   | Normal      |
| NLB-21                         | Whole  | Rabbit  | Normal      |
| <b>Skin Lysates</b>            |        |         |             |
| NLH-18                         | Whole  | Human   | Normal      |
| TLH-18                         | Whole  | Human   | Tumor       |
| <b>Spinal Cord Lysates</b>     |        |         |             |
| SLH-027                        | Whole  | Human   | Normal      |
| SLM-027                        | Whole  | Mouse   | Normal      |
| PBL-01                         | Whole  | Macaque | Normal      |
| SLR-027                        | Whole  | Rat     | Normal      |
| <b>Spleen Lysates</b>          |        |         |             |
| NLH-05                         | Whole  | Human   | Normal      |
| NLM-05                         | Whole  | Mouse   | Normal      |
| NLR-05                         | Whole  | Rat     | Normal      |

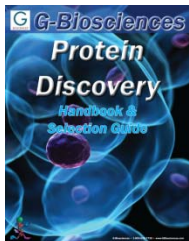
| Cat. #                        | Region | Species | Tissue Type |
|-------------------------------|--------|---------|-------------|
| <b><i>Stomach Lysates</i></b> |        |         |             |
| NLH-12                        | Whole  | Human   | Normal      |
| TLH-12                        | Whole  | Human   | Tumor       |
| <b><i>Testis Lysates</i></b>  |        |         |             |
| NLH-06                        | Whole  | Human   | Normal      |
| TLH-06                        | Whole  | Human   | Tumor       |
| NLM-06                        | Whole  | Mouse   | Normal      |
| NLR-06                        | Whole  | Rat     | Normal      |
| <b><i>Thyroid Lysates</i></b> |        |         |             |
| NLH-19                        | Whole  | Human   | Normal      |
| TLH-19                        | Whole  | Human   | Tumor       |
| <b><i>Uterus Lysates</i></b>  |        |         |             |
| NLH-11                        | Whole  | Human   | Normal      |
| TLH-11                        | Whole  | Human   | Tumor       |

## REFERENCE

1. Laemmli, U.K. (1970) Nature. 227: 680

## RELATED PRODUCTS

Download our Protein Discovery Handbook.



<http://info.gbiosciences.com/complete-protein-discovery-handbook>

For other related products, visit our website at [www.GBiosciences.com](http://www.GBiosciences.com) or contact us.

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