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Datasheet for W09-001-GJ5

Hep-G2 Lysate

Overview

Description:	Hep-G2 - Whole Cell Lysate - W09-001-GJ5
Item No.:	W09-001-GJ5
Size:	500 µg
Applications:	SDS-PAGE, WB, Cellular Assay
Origin:	Human

Product Details

Background:	Multi-purpose Hep-G2 Whole Cell Lysates produced by Rockland Immunochemicals are derived from cell lines using highly refined extraction protocols to ensure exceptionally high quality, protein integrity and lot-to-lot reproducibility. All extracts are tested by SDS-PAGE using 4-20% gradient gels.
Synonyms:	HepG2 Lysate, Cell Lysate, Hep-G2 Lysate
Species of Origin:	Human
Clone ID:	Hep-G2

Target Details

Purity/Specificity:	Hep-G2 cells were grown in Eagle's Minimum Essential Medium supplemented with 10% fetal bovine serum. Cells were washed with PBS and then incubated on ice in modified RIPA buffer to lyse the cells. Protein integrity was ensured using a cocktail of protease inhibitors with broad specificity for the inhibition of aspartic, cysteine, and serine proteases as well as aminopeptidases (0.1 mM AEBSF HCl, 0.08 µM Aprotinin, 5 µM Bestatin, 1.5 µM E-64, 2 µM Leupeptin Hemisulfate, 1 µM Pepstatin A). Phosphatase inhibitors include sodium fluoride, sodium orthovanadate, sodium pyrophosphate and β-glycerophosphate. Cell debris was removed by centrifugation. Protein concentration was determined by a modified Lowry assay using a commercially available kit. Protein concentration was adjusted to 4 mg/ml with 1X RIPA buffer including protease and phosphatase inhibitors.

Application Details

Tested Applications:	SDS-PAGE, WB
Suggested Applications:	Cellular Assay (Based on references)
Application Note:	W09-001-GJ5 has been tested by SDS-PAGE and western blot. Multi-purpose Hep-G2 Whole Cell Lysate is especially prepared as positive control for multiple assays including western blot, immunoprecipitation (IP), capture ELISA or other assays requiring native protein sample. For separation by SDS-PAGE and subsequent western blot analysis, lysates should be diluted by user to desired concentration in SDS-PAGE buffer with 2-mercaptoethanol or dithiothreitol as the reducing agent and heated to 95° C for 5 minutes. Sample is ready for use in immunoprecipitation and ELISA experiments, conditions should be optimized by the user. Rockland recommends its TrueBlot IP reagents for immunoprecipitation experiments.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ChIP:	User Optimized
IP:	User Optimized
WB:	User Optimized
Other:	User Optimized

Cell Line Data

Cell Line:	Human - hepatocellular carcinoma
Lysate Fractionation:	Whole Cell Lysate
Lysate Stimulation:	Not Stimulated
Culture Type:	Tissue Culture
Induction:	None (Control)

Formulation

Physical State:	Liquid (sterile filtered)
Concentration:	1.0 mg/mL by BCA assay
Buffer:	1X RIPA Buffer with HALT Protease and Phosphatase Inhibitors
Preservative:	None
Stabilizer:	None

Shipping & Handling

Shipping Condition:	Dry Ice

Storage Condition:	Store Hep-G2 Whole Cell Lysate at -70° C or COLDER. For extended storage, whole cell lysate to minimize freeze/thaw cycles.
Expiration:	Expiration date is three (3) months from date of receipt.

Images

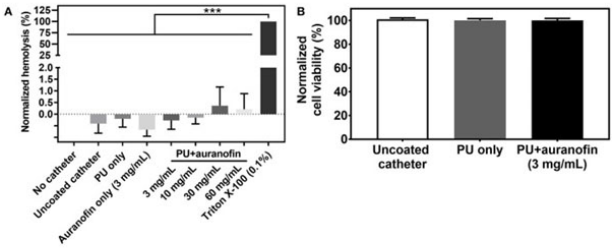


Figure
Cytotoxicity of PU+auranofin coatings. (A) Percent normalized hemolysis of hRBCs exposed to uncoated catheters, PU only, auranofin only (formulated at a 3 mg/mL auranofin coating concentration), PU+auranofin (formulated at 3, 10, 30, and 60 mg/mL auranofin coating concentrations) compared to negative controls of untreated hRBCs and a Triton X-100 incubated positive control. (B) Normalized HepG2 liver cell viability upon exposure to media incubated with uncoated catheters, PU only, and PU+auranofin (formulated at a 3 mg/mL auranofin coating concentration) catheters for 24 h. Data are shown as mean ± standard deviation. Statistical significance was evaluated using one-way ANOVA (n = 3) and is shown as ***$p < 0.001$ indicating statistical significance between the positive control (Triton X-100 with hRBCs) and other conditions tested. No statistical significance was noted between the other hemolysis conditions tested or between the different HepG2 viability conditions examined ($p > 0.5$). HepG2 (p/n W09-001-GJ5). Figure 8. PMID: 30873389.

References

- Liu, H et al. Auranofin Releasing Antibacterial and Antibiofilm Polyurethane Intravascular Catheter Coatings. *Frontiers in Cellular and Infection Microbiology* (2019)

Disclaimer

No test method can provide total assurance that the hepatitis B virus, hepatitis C virus, human immunodeficiency virus, or any other infectious agents are absent. Thus, all blood products, including purified proteins derived from human blood sources, should be handled at Biosafety Level 2 as recommended by the CDC\NIH manual entitled Biosafety in Microbiological and Biomedical Laboratories for potentially infectious human serum, blood specimens or proteins derived from same. Source material for the human blood product supplied to your facility has been tested for the detection of HIV antibody, Hepatitis B surface antigen, antibody to Hepatitis C, HIV 1 antigen(s), antibody to HTLV - I/II, and syphilis by FDA guidelines. All units were found to be non-reactive/negative for these tests. All human blood source material is collected in FDA licensed centers and is tested with FDA approved test kits.

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