

Product Specification Sheet

Product: Normal Rat Brain Whole Cell Lysate (Ready-to-Use)

Code: W12-000-T077

Lot # 16217

Size: 500 µg (500 µl)

Physical State: Liquid (sterile filtered)

Total Protein Concentration: 1.0 mg/ml (by Lowry Assay)

Buffer: 1X SDS-PAGE Sample Buffer consisting of 50 mM Tris HCl, 2% SDS, 10% Glycerol and 0.005% bromophenol blue, pH 6.8.

Cell Type: Brain - Rat (mixed breed and sex)

Induction: None (Control)

Background): Ready-to-use whole cell lysates produced by Rockland Immunochemicals are derived from cell lines or tissues 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 and immunoblot analysis using antibodies to key cell signaling components to confirm the presence of both high molecular weight and low molecular weight proteins.

Application(s): Ready-to-use lysates are especially prepared as positive controls for separation by SDS-PAGE and subsequent western blot analysis. Lysates are prepared in denaturing buffer WITHOUT dissociating agents (i.e. no 2-mercaptoethanol or dithiothreitol has been added).

Preparation Method: Tissues were washed exhaustively with PBS to remove blood and other debris. The lysate was prepared by homogenizing the tissue and washing the cells in cold PBS. Washed cells were incubated at 4° C in modified RIPA buffer containing 150 mM sodium chloride, 50 mM Tris Cl, pH 7.4, 1 mM EDTA, 1.0% NP-40, 0.5% sodium deoxycholic acid and 0.1% SDS to lyse the cells. Protein integrity is 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 and 1 µM Pepstatin A). The following phosphatase inhibitors were also added: 1 mM NaF and 1 mM Na₃VO₄. Cell debris was removed by centrifugation and membrane filtration. Protein concentration was determined by Lowry assay using a commercially available kit. The protein concentration was adjusted to 2 mg/ml and then an equal volume of 2X SDS-PAGE sample buffer was added.

Recommended Dilution(s): Heat lysate to 95° C for 5 minutes and rapidly cool. If dissociating conditions are desired add reducing agent prior to heating. The recommended loading volume per lane is 10-20 µl depending on the size format of your gel.

Storage Conditions: Store vial at -20° C or COLDER. For extended storage, aliquot contents to minimize freeze/thaw cycles. Expiration date is three (3) months from date of opening if stored at -20° C or (1) year from date of opening if stored at -70°C.

Custom Service(s): Please inquire for nuclear and/or whole cell extracts from other unstimulated or stimulated cell lines or normal tissues in both research and bulk quantities. Custom lysates from researcher-provided cell lines are also prepared using our highly refined extraction protocols. Please contact our Technical Service staff for additional details.

USDA Certification: All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation.

Note: This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information.