SANTA CRUZ BIOTECHNOLOGY, INC.

RAW 264.7 + PMA nuclear extract: sc-24962

BACKGROUND

Santa Cruz Biotechnology Inc. offers a range of intact mammalian nuclear protein extracts for your proteomics research, including DNA binding electrophoretic mobility shift assays (EMSA), and with primary antibodies, for use as western blotting endogenous protein expression controls. Human *(Homo sapiens)*, mouse *(Mus musculus)*, and rat *(Rattus norvegicus)* nuclear extracts are enriched from in vitro suspension-type, or adherent-type cell cultures, that are maintained under controlled conditions, and according to each lineage specific cell culture specification. Nuclear extraction methodology ensures both protein integrity, and lot-to-lot reproducibility. Each preparation contains a consistent concentration and assortment of endogenous nuclear proteins capable of binding DNA, and/or class II/III polymerase activity. RAW 264.7 is a differentiated monocyte/macrophage, that originates from Abelson murine leukemia virus-induced tumor ascites, BALB/c, *Mus musculus* (mouse).

REFERENCES

1. Snyder, R.M., et al. 1897. Cellular interactions of auranofin and a related gold complex with RAW 264.7 macrophages. Biochem. Pharmacol. 36: 647-654.
2. Kong, L., et al. 2019. Overview of RAW264.7 for osteoclastogensis study: Phenotype and stimuli. J. Cell. Mol. Med. 23: 3077-3087.
3. Li, Y.J., et al. 2021. Artificial exosomes for translational nanomedicine. J. Nanobiotechnology 19: 242.
4. Facchin, B.M., et al. 2022. Inflammatory biomarkers on an LPS-induced RAW 264.7 cell model: a systematic review and meta-analysis. Inflamm. Res. 71: 741-758.

SOURCE

Organism:	*Mus musculus* (mouse)
Source:	Abelson murine leukemia virus transformed male BALB/c 1978
Tissue of Origin:	Ascites (tumor)
Cell Type:	monocyte/macrophage
Growth:	Adherent

PRODUCT

Mammalian nuclear extracts are supplied as 1000 µg total in 4 vials at 250 µg/50 µl per vial (5 µg/µl concentration), in 20 mM HEPES (pH 7.9), 20% v/v glycerol, 0.1 M KCl, 0.2 mM EDTA, 0.5 mM PMSF and 0.5 mM DTT buffer. Optimized for maximum protein and DNA-binding activity.

APPLICATIONS

Mammalian nuclear extracts (5 µg/µl) contain intact proteins, and are suitable for proteomics research, including DNA binding assays (EMSA), and as Western Blotting positive controls; pipet 1:1 volume:volume of Electrophoresis Sample Buffer, 2X (sc-24945) to equal volume of nuclear extract, heat at 95° C for 3-5 minutes. Recommended loading at 20-30 µg/lane.

PREPARATION METHOD

Mammalian cells are cultured *in vitro* under an appropriate buffered media condition to either an optimal suspension cell density or optimal adherent sub-conlfluency. Cells are harvested from cell culture media, and undergo a series of centrifugation, resuspension, homogenization and dialysis steps. Nuclear extracts are adjusted to a final concentration of 5 µg/µl, with each product containing total 1000 µg protein divided into four separate vials (4 x 250 µg/50 µl).

STORAGE

Store at -70° C, avoid repeated freeze/thaw cycles. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.