Human/Mouse/Rat Nucleostemin Antibody

Antigen Affinity-purified Polyclonal Goat IgG
Catalog Number: AF1638

DESCRIPTION

Species Reactivity	Human/Mouse/Rat
Specificity	Detects human, mouse, rat Nucleostemin in direct ELISAs and Western blots. In direct ELISAs, less than 1% cross-reactivity with recombinant rat Nucleostemin C-terminal peptide (aa 281-538) is observed. Rat Nucleostemin specific IgG was purified by first passing the sera over a rat Nucleostemin aa 2-538 column and then passing the bound fraction over a rat Nucleostemin aa 281-538 column to removed rat Nucleostemin C-terminal specific IgG.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	*E. coli*-derived recombinant rat Nucleostemin Lys2-Ile538 Accession # Q811S9
Formulation	Lyophilized from a 0.2 μm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 μm filtered solution in PBS.

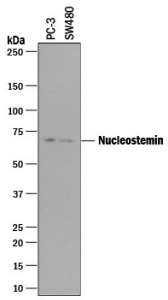
APPLICATIONS

Please Note: *Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.*

	Recommended Concentration	Sample
Western Blot	0.25 µg/mL	See Below
Immunocytochemistry	5-15 µg/mL	See Below
Simple Western	5 µg/mL	See Below

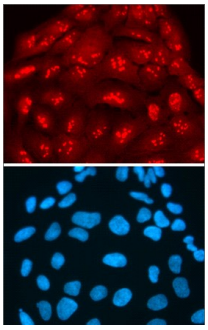
DATA

Western Blot



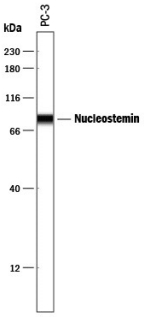
Detection of Human Nucleostemin by Western Blot. Western blot shows lysates of PC-3 human prostate cancer cell line and SW480 human colorectal adenocarcinoma cell line. PVDF membrane was probed with 0.25 µg/mL of Goat Anti-Human/Mouse/Rat Nucleostemin Antigen Affinity-purified Polyclonal Antibody (Catalog # AF1638) followed by HRP-conjugated Anti-Goat IgG Secondary Antibody (Catalog # HAF109). A specific band was detected for Nucleostemin at approximately 70 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.

Immunocytochemistry



Nucleostemin in U2OS Human Cell Line. Nucleostemin was detected in immersion fixed U2OS human osteosarcoma cell line using 10 µg/mL Goat Anti-Human/Mouse/Rat Nucleostemin Antigen Affinity-purified Polyclonal Antibody (Catalog # AF1638) for 3 hours at room temperature. Cells were stained with the NorthernLights™ 557-conjugated Anti-Goat IgG Secondary Antibody (red, upper panel; Catalog # NL001) and counterstained with DAPI (blue, lower panel). View our protocol for Fluorescent ICC Staining of Cells on Coverslips.

Simple Western



Detection of Human Nucleostemin by Simple Western™. Simple Western lane view shows lysates of PC-3 human prostate cancer cell line, loaded at 0.2 mg/mL. A specific band was detected for Nucleostemin at approximately 83 kDa (as indicated) using 5 µg/mL of Goat Anti-Human/Mouse/Rat Nucleostemin Antigen Affinity-purified Polyclonal Antibody (Catalog # AF1638) followed by 1:50 dilution of HRP-conjugated Anti-Goat IgG Secondary Antibody (Catalog # HAF109). This experiment was conducted under reducing conditions and using the 12-230 kDa separation system.

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.2 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	**Use a manual defrost freezer and avoid repeated freeze-thaw cycles.** ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 6 months, -20 to -70 °C under sterile conditions after reconstitution.

bio-techne®
Global bio-techne.com info@bio-techne.com techsupport@bio-techne.com TEL +1 612 379 2956
USA TEL 800 343 7475 Canada TEL 855 668 8722 China TEL +86 (21) 52380373
Europe | Middle East | Africa TEL +44 (0)1235 529449

Human/Mouse/Rat Nucleostemin Antibody

Antigen Affinity-purified Polyclonal Goat IgG
Catalog Number: AF1638

BACKGROUND

Nucleostemin is a protein found in the nucleoli of embryonic stem cells, adult CNS stem cells, primitive cells in the bone marrow and cancer cells. It is not in the differentiated cells of most adult tissues. It has been suggested to play a role in controlling the cell-cycle progression in stem cells and cancer cells (1-3).

References:

1. Tsai, R.Y. and R.D. McKay (2002) Genes Dev. **16**:2991.
2. Baddoo, M. *et al.* (2003) J. Cell Biochem. **89**:1235.
3. Normile, D. (2002) Science **298**:1869.

bio-techne®
Global bio-techne.com info@bio-techne.com techsupport@bio-techne.com TEL +1 612 379 2956
USA TEL 800 343 7475 **Canada** TEL 855 668 8722 **China** TEL +86 (21) 52380373
Europe | Middle East | Africa TEL +44 (0)1235 529449