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.

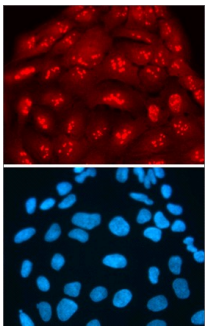
APPLICATIONS

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	0.1 µg/mL	Recombinant Rat Nucleostemin
Immunocytochemistry	5-15 µg/mL	See Below

DATA

Immunocytochemistry



Nucleostemin in U2OS Human Cell Line. Nucleostemin was detected in immersion fixed U2OS human osteosarcoma cell line using 10 µg/mL 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.

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.
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 from date of receipt, 2 to 8 °C, reconstituted. ● 6 months from date of receipt, -20 to -70 °C, reconstituted.

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.