

## DESCRIPTION

<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects human NUP85 in direct ELISAs and Western blots. In direct ELISAs, approximately 50% cross-reactivity with recombinant mouse NUP85 is observed.
<b>Source</b>	Polyclonal Sheep IgG
<b>Purification</b>	Antigen Affinity-purified
<b>Immunogen</b>	<i>E. coli</i> -derived recombinant human NUP85 Accession # Q9BW27
<b>Formulation</b>	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.

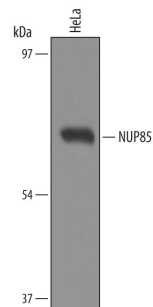
## APPLICATIONS

**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
<b>Western Blot</b>	1 µg/mL	See Below
<b>Immunocytochemistry</b>	5-15 µg/mL	See Below

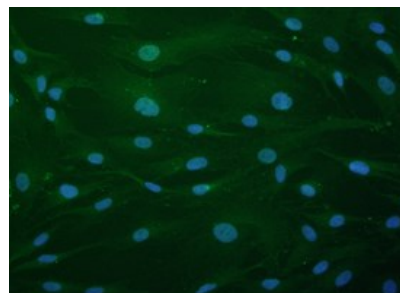
## DATA

### Western Blot



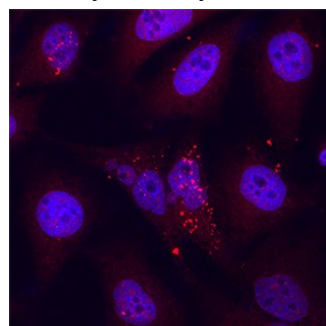
**Detection of Human Nucleoporin NUP85 by Western Blot.** Western blot shows lysates of HeLa human cervical epithelial carcinoma cell line. PVDF membrane was probed with 1 µg/mL of Sheep Anti-Human Nucleoporin NUP85 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF5976) followed by HRP-conjugated Anti-Sheep IgG Secondary Antibody (Catalog # Catalog # HAF016). A specific band was detected for Nucleoporin NUP85 at approximately 70 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 8.

### Immunocytochemistry



**Nucleoporin NUP85 in Human MSCs.** Nucleoporin NUP85 was detected in immersion fixed human multipotent stromal cells (MSCs) using Sheep Anti-Human Nucleoporin NUP85 Antigen Affinity-purified Poly-clonal Antibody (Catalog # AF5976) at 10 µg/mL for 3 hours at room temperature. Cells were stained using the Northern-Lights™ 493-conjugated Anti-Sheep IgG Secondary Antibody (green; Catalog # Catalog # NL012) and counterstained with DAPI (blue). View our protocol for [Fluorescent ICC Staining of Cells on Coverslips](#).

### Immunocytochemistry



**Nucleoporin NUP85 in HeLa Human Cell Line.** Nucleoporin NUP85 was detected in immersion fixed HeLa human cervical epithelial carcinoma cell line using Sheep Anti-Human Nucleoporin NUP85 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF5976) at 5 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Sheep IgG Secondary Antibody (red; Catalog # NL010) and counterstained with DAPI (blue). Specific staining was localized to cytoplasm. Staining was performed using our protocol for [Fluorescent ICC Staining of Non-adherent Cells](#).

## 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.

## BACKGROUND

NUP85 (Nucleoporin 85; also Nup75/nucleoporin 75 and FROUNT) is a 70-72 kDa member of the nucleoporin Nup85 family of proteins. It is one of nine members of the Nup107-160 subcomplex that performs at least two functions in the cell. First, it serves as an assembly point for nuclear pore formation, and may stabilize the bend that normally exists between the inner and outer nuclear membranes. Second, it appears to be quite stable, and during mitosis, promotes mitotic spindle assembly. Human NUP85 is 656 amino acids (aa) in length. It is an  $\alpha$ -helical protein with no obvious domain(s) or structural motif. Phosphorylation on Ser233, however, may regulate the overall interaction of the NUP107-160 subcomplex with the much larger nuclear pore. There one potential splice form that shows an alternative start site at Met47. Full-length NUP85 shares 92% aa identity with mouse NUP85.