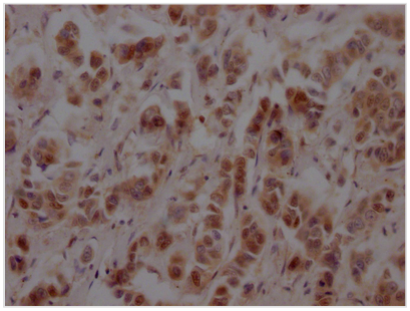
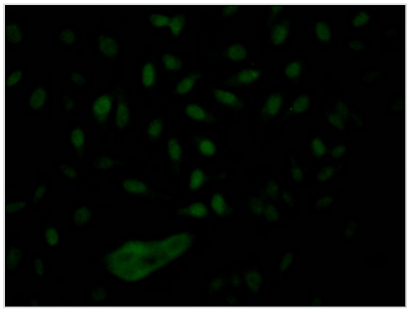
NUP153 Antibody

Product Code	CSB-RA986790A0HU
Storage	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.
Uniprot No.	P49790
Immunogen	A synthesized peptide derived from human Nup153
Species Reactivity	Human
Tested Applications	ELISA, IHC, IF; Recommended dilution: IHC:1:50-1:200, IF:1:20-1:200
Relevance	Component of the nuclear pore complex (NPC), a complex required for the trafficking across the nuclear envelope. Functions as a scaffolding element in the nuclear phase of the NPC essential for normal nucleocytoplasmic transport of proteins and mRNAs. Involved in the quality control and retention of unspliced mRNAs in the nucleus; in association with TPR, regulates the nuclear export of unspliced mRNA species bearing constitutive transport element (CTE) in a NXF1- and KHDRBS1-independent manner. Mediates TPR anchoring to the nuclear membrane at NPC. The repeat-containing domain may be involved in anchoring other components of the NPC to the pore membrane. Possible DNA-binding subunit of the nuclear pore complex (NPC).
Form	Liquid
Conjugate	Non-conjugated
Storage Buffer	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Purification Method	Affinity-chromatography
Isotype	Rabbit IgG
Clonality	Monoclonal
Product Type	Recombinant Antibody
Immunogen Species	Homo sapiens (Human)
Research Area	Epigenetics and Nuclear Signaling; Tags & Cell Markers; Signal transduction
Gene Names	NUP153
Accession NO.	8D4

Image



IHC image of CSB-RA986790A0HU diluted at 1:100 and staining in paraffin-embedded human breast cancer performed on a Leica BondTM system. After dewaxing and hydration, antigen retrieval was mediated by high pressure in a citrate buffer (pH 6.0). Section was blocked with 10% normal goat serum 30min at RT. Then primary antibody (1% BSA) was incubated at 4°C overnight. The primary is detected by a Goat anti-rabbit IgG polymer labeled by HRP and visualized using 0.05% DAB.



Immunofluorescence staining of Hela Cells with CSB-RA986790A0HU at 1:50, counter-stained with DAPI. The cells were fixed in 4% formaldehyde, permeated by 0.2% TritonX-100, and blocked in 10% normal Goat Serum. The cells were then incubated with the antibody overnight at 4°C. Nuclear DNA was labeled in blue with DAPI. The secondary antibody was FITC-conjugated AffiniPure Goat Anti-Rabbit IgG (H+L).

Description

NUP153 is essential for the recruitment of TPR during the construction of the postmitotic nuclear pore complex (NPC) but is dispensable for the anchoring of TPR that has already been localized within the assembled nuclear pore. NUP50 is reliant on NUP153, as its depletion leads NUP50 to be ejected from the NPC. NUP153 depletion caused early differentiation in human ESCs, and it was discovered to be important in silencing the developmental gene without affecting nucleocytoplasmic transport. NUP153 interacts with the transcription factor Sox2 and is downregulated during neural progenitor cell development into neurons. NUP153 not only interacts with Sox2 in neuronal development and cell proliferation, but it also interacts with and co-regulates other genes, implying that it may play a role in neural fate determination.

The recombinant NUP153 antibody is a monoclonal antibody molecule expressed by using recombinant DNA and protein engineering technology to clone the genes encoding the NUP153 antibody into a plasma vector and then by transfecting the vector clone into the appropriate recipient mammalian cells for production. It was purified using Affinity-chromatography. And it shows reactivity with NUP153 protein from Human. This recombinant NUP153 antibody can be used in the ELISA, IHC, IF.