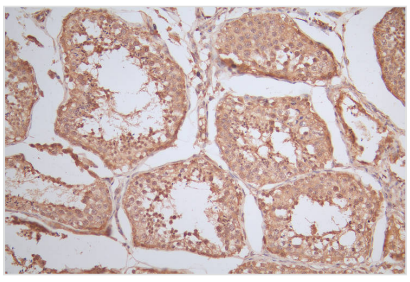
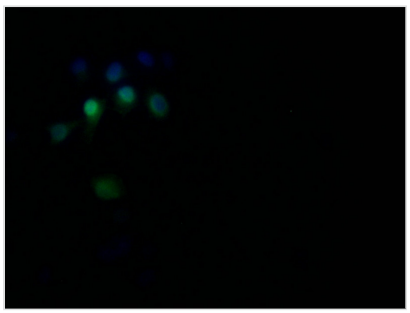
RAN Recombinant Monoclonal Antibody

Product Code	CSB-RA191819A0HU
Storage	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.
Uniprot No.	P62826
Immunogen	A synthesized peptide derived from Human RAN
Species Reactivity	Human
Tested Applications	ELISA, IHC, IF, FC; Recommended dilution: IHC:1:50-1:200, IF:1:50-1:200, FC:1:50-1:200
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	Others
Gene Names	RAN
Clone No.	15A8

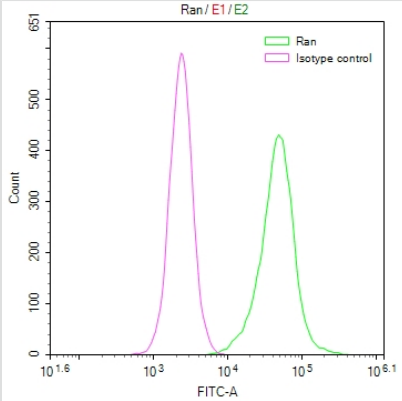
Image



IHC image of CSB-RA191819A0HU diluted at 1:100 and staining in paraffin-embedded human testis tissue 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 polymer IgG labeled by HRP and visualized using 0.78% DAB.



Immunofluorescence staining of Hela with CSB-RA191819A0HU at 1:30, counter-stained with DAPI. The cells were fixed in 4% formaldehyde and blocked in 10% normal Goat Serum. The cells were then incubated with the antibody overnight at 4°C. The secondary antibody was Alexa Fluor 527-congugated AffiniPure Goat Anti-Rabbit IgG(H+L).



Overlay Peak curve showing Hela cells stained with CSB-RA191819A0HU (red line) at 1:50. The cells were fixed in 4% formaldehyde and permeated by 0.2% TritonX-100. Then 10% normal goat serum to block non-specific protein-protein interactions followed by the antibody (1μg/1*10^{6}cells) for 45min at 4?. The secondary antibody used was FITC-conjugated Goat Anti-rabbit IgG(H+L) at 1:200 dilution for 35min at 4?.Control antibody (green line) was rabbit IgG (1μg/1*10^{6}cells) used under the same conditions. Acquisition of >10,000 events was performed.

Description

The process of generating the RAN recombinant monoclonal antibody commences with the acquisition of the RAN antibody genes. These RAN antibody genes are then introduced into suitable host cells, which are cultured for the synthesis of RAN antibodies. This approach offers numerous benefits, including a significant enhancement in the purity and stability of the resulting RAN recombinant monoclonal antibodies, as well as an increase in their affinity and specificity. After synthesis, the RAN recombinant monoclonal antibody undergoes purification via affinity chromatography. Subsequently, it undergoes extensive testing through various assays, including ELISA, IHC, IF, and FC. This antibody specifically targets the human RAN protein.

The GTP-binding nuclear protein Ran is a critical regulator of nucleocytoplasmic transport, facilitating the import and export of molecules between the nucleus and cytoplasm. Its role in maintaining proper cellular compartmentalization, coordinating mitotic processes, and regulating the integrity of nuclear pore complexes makes Ran essential for fundamental cellular functions and cell cycle progression.