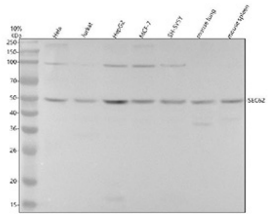
SEC62 Antibody / Translocation protein SEC62 [clone 31S64] (FY13324)

Catalog No.	Formulation	Size
FY13324	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA	100 ul

Recombinant RABBIT MONOCLONAL

Bulk quote request

Availability	2-3 weeks
Species Reactivity	Human, Mouse, Rat
Format	Liquid
Host	Rabbit
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG
Clone Name	31S64
Purity	Affinity chromatography
Buffer	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.
UniProt	Q99442
Applications	Western blot: 1:500-1:2000 Immunohistochemistry: 1:50-1:200 Immunocytochemistry/Immunofluorescence: 1:50-1:200
Limitations	This SEC62 antibody is available for research use only.



Western blot testing of human and mouse samples using the SEC62 antibody at 1:1000 dilution for 1 hour at room temperature. Predicted molecular weight ~50 kDa. A faint band at approximately 100 kDa is occasionally observed in tumor cell lines and may represent an SDS-resistant dimer or SEC62-containing complex rather than a distinct isoform.

Description

SEC62 antibody detects Translocation protein SEC62, encoded by the SEC62 gene. Translocation protein SEC62 is an

endoplasmic reticulum membrane protein that functions as part of the SEC61-SEC62-SEC63 complex required for posttranslational translocation of proteins into the endoplasmic reticulum. SEC62 antibody provides researchers with a specific reagent for investigating protein translocation, endoplasmic reticulum biology, and disease processes associated with protein trafficking.

Translocation protein SEC62 cooperates with the SEC61 channel and SEC63 cochaperone to mediate insertion of polypeptides into the endoplasmic reticulum lumen. Research using SEC62 antibody has shown that it functions particularly in the import of short signal peptide proteins and stress-inducible proteins. This activity helps maintain proteostasis under conditions of cellular stress, ensuring that unfolded or newly synthesized proteins are efficiently imported and processed.

Studies with SEC62 antibody have revealed that the protein also contributes to the unfolded protein response and endoplasmic reticulum stress adaptation. By regulating the influx of client proteins, Translocation protein SEC62 limits accumulation of misfolded proteins and protects cells from apoptosis. These findings underscore its protective role in maintaining endoplasmic reticulum homeostasis.

In cancer biology, overexpression of SEC62 has been identified in lung, prostate, and thyroid cancers. Research using SEC62 antibody has demonstrated that elevated expression enhances stress tolerance, migration, and invasion, linking the protein to aggressive tumor phenotypes. Because of these properties, SEC62 is being explored as a prognostic biomarker and therapeutic target in oncology.

SEC62 antibody is widely used in western blotting, immunohistochemistry, and immunofluorescence. Western blotting detects SEC62 expression under stress conditions, immunohistochemistry highlights localization to the endoplasmic reticulum in tissues, and immunofluorescence shows its membrane association with endoplasmic reticulum structures. These applications make SEC62 antibody an important reagent in cell biology and disease research.

By supplying validated SEC62 antibody reagents, NSJ Bioreagents supports studies into endoplasmic reticulum function, protein translocation, and cancer. Detection of Translocation protein SEC62 provides insight into how cells regulate protein import under both normal and pathological conditions.

Application Notes

Optimal dilution of the SEC62 antibody should be determined by the researcher.

Immunogen

A synthesized peptide derived from human SEC62 was used as the immunogen for the SEC62 antibody.

Storage

Store the SEC62 antibody at -20oC.

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