

# Rabbit Anti-Nsp1p antibody

## SL19475R

Product Name:	Nsp1p
Chinese Name:	核孔蛋白NSP1抗体
Alias:	NSP 1; NSP1; Nsp1p; NSP1_YEAST; Nuclear pore protein NSP1; Nucleoporin NSP1;
	Nucleoskeletal-like protein; p110.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Saccharomyces cerevisiae
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-
	500IF=1:100-500 (Paraffin sections need antigen repair)
	not yet tested in other applications.
	optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	86kDa
Cellular localization:	The nucleus
Form:	Lyophilized or Liquid
Concentration:	lmg/ml
immunogen:	KLH conjugated synthetic peptide derived from Saccharomyces cerevisiae Nsp1p:451-
	550/823
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 癈 for one year. Avoid repeated freeze/thaw cycles. The lyophilized
	antibody is stable at room temperature for at least one month and for greater than a year
	when kept at -20癈. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of
	antibody the antibody is stable for at least two weeks at 2-4 癈.
PubMed:	PubMed
Product Detail:	NSP1 functions as a component of the nuclear pore complex (NPC). It plays an
	important role in several nuclear transport pathways including poly(A)+ RNA, tRNA,
	pre-ribosome, signal recognition particle (SRP), and protein transport.

#### Function:

Functions as a component of the nuclear pore complex (NPC). NPC components, collectively referred to as nucleoporins (NUPs), can play the role of both NPC structural components and of docking or interaction partners for transiently associated nuclear transport factors. Active directional transport is assured by both, a Phe-Gly (FG) repeat affinity gradient for these transport factors across the NPC and a transport cofactor concentration gradient across the nuclear envelope (GSP1 and GSP2 GTPases associated predominantly with GTP in the nucleus, with GDP in the cytoplasm). NSP1 plays an important role in several nuclear transport pathways including poly(A)+ RNA, tRNA, pre-ribosome, signal recognition particle (SRP), and protein transport.

#### **Subunit:**

The nuclear pore complex (NPC) constitutes the exclusive means of nucleocytoplasmic transport. NPCs allow the passive diffusion of ions and small molecules and the active, nuclear transport receptor-mediated bidirectional transport of macromolecules such as proteins, RNAs, ribonucleoparticles (RNPs), and ribosomal subunits across the nuclear envelope. The 55-60 MDa NPC is composed of at least 31 different subunits: ASM4, CDC31, GLE1, GLE2, NDC1, NIC96, NSP1, NUP1, NUP2, NUP100, NUP116, NUP120, NUP133, NUP145, NUP157, NUP159, NUP170, NUP188, NUP192, NUP42, NUP49, NUP53, NUP57, NUP60, NUP82, NUP84, NUP85, POM152, POM34, SEH1 and SEC1. Due to its 8-fold rotational symmetry, all subunits are present with 8 copies or multiples thereof. NSP1 interacts alternatively with NUP82 or NUP57 through its C-terminal coiled coil in two distinct NPC subcomplexes, the NUP82 subcomplex (NUP82, NSP1, NUP159) and the NUP57 subcomplex (NIC96, NSP1, NUP49, NUP57). The NUP82 subcomplex is the base for interactions with NUP116 and GLE2 and with NUP42 and GLE1. Interacts through its FG repeats with karyopherins, such as KAP95, KAP123, PSE1, LOS1, NTF2, the heterodimeric mRNA transport factor MEX67/MTR2, and GSP1.

#### Subcellular Location:

Nucleus ?nuclear pore complex. Nucleus membrane; Peripheral membrane protein; Cytoplasmic side. Nucleus membrane; Peripheral membrane protein; Nucleoplasmic side.

### Gene ID:

853409

#### Database links:

Entrez Gene: 853409 Saccharomyces cerevisiae

SwissProt: P14907 Saccharomyces cerevisiae

#### **Important Note:**

This product as supplied is intended for research use only, not for use in human,

therapeutic or diagnostic applications.

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