



Rabbit Anti-phospho-Separase (Ser1073) antibody

SL5304R

Product Name:	phospho-Separase (Ser1073)
Chinese Name:	磷酸化外纺锤体极样蛋白1抗体
Alias:	Caspase like protein ESPL1; ESP 1; ESP1; ESP-1; ESPL 1; ESPL1; ESPL-1; Extra spindle poles like 1; Extra spindle poles like 1 protein; Separin; Similar to fission yeast cut1 and gene; SSE; Separase; ESPL1 HUMAN.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,
Applications:	ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800IF=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:	198kDa
Cellular localization:	The nucleuscytoplasmic
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated Synthesised phosphopeptide derived from human ESPL1 around the phosphorylation site of Ser1073:LD(p-S)VK
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 °C 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°C. 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 °C.
PubMed:	PubMed
Product Detail:	Separase is a cysteine protease that is essential for mitotic progression by separating sister chromatids. Each cell must receive one chromatid of every chromosome, during

mitosis. Cohesin plays an important role in cohering sister chromatids during the prophase through anaphase stages of mitosis, making certain that genomic information is replicated accurately. As the cellular division process continues, separase destroys cohesin by means of cleavage, allowing the chromatids to separate and divide with the cell. Separase activity is highly regulated. It not only cleaves cohesin at the onset of anaphase but also cleaves itself, promoting downregulation of separase after anaphase. Should a human cell become an aneuploid (one too many or too few chromatids), the embryo most likely will not survive. Should the embryo survive, it will most likely develop severe birth defects or later develop malignant cancers.

Function:

Caspase-like protease, which plays a central role in the chromosome segregation by cleaving the SCC1/RAD21 subunit of the cohesin complex at the onset of anaphase. During most of the cell cycle, it is inactivated by different mechanisms.

Subunit:

Interacts with PTTG1. Interacts with RAD21.

Subcellular Location:

Cytoplasmic and Nuclear

Post-translational modifications:

Autocleaves. This function, which is not essential for its protease activity, is unknown. Phosphorylated by CDK1. There are 8 Ser/Thr phosphorylation sites. Among them, Ser-1126 phosphorylation is the major site, which conducts to the enzyme inactivation.

Similarity:

Belongs to the peptidase C50 family.

SWISS:

Q14674

Gene ID:

9700

Database links:

[Entrez Gene: 9700](#)Human

[Entrez Gene: 105988](#)Mouse

[Omim: 604143](#)Human

[SwissProt: Q14674](#)Human

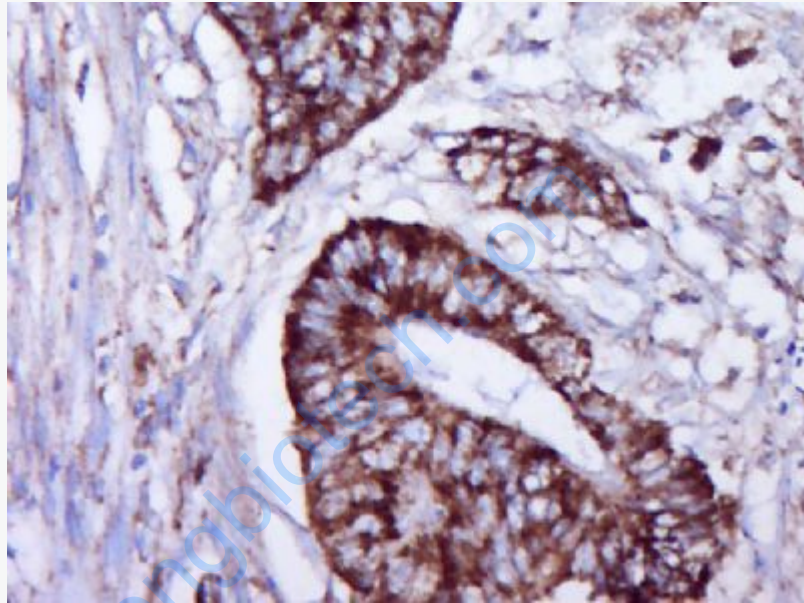
[SwissProt: P60330](#)Mouse

[Unigene: 153479](#)Human

[Unigene: 288324](#)Mouse

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.



Picture:

Paraformaldehyde-fixed, paraffin embedded (Human cervical cancer); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (p-Separase (Ser1073)) Polyclonal Antibody, Unconjugated (SL5304R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.