10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Phospho-SEPARIN(S1126) Antibody

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP3247a

Product Information

Application	DB, IHC-P, E
Primary Accession	Q14674
Reactivity	Human
Predicted	Rabbit
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	233175

Additional Information

Gene ID	9700
Other Names	Separin, Caspase-like protein ESPL1, Extra spindle poles-like 1 protein, Separase, ESPL1, ESP1, KIAA0165
Target/Specificity	This SEPARIN Antibody is generated from rabbits immunized with a KLH conjugated synthetic phosphopeptide corresponding to amino acid residues surrounding S1126 of human SEPARIN.
Dilution	DB~~1:500 IHC-P~~1:100~500 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	Phospho-SEPARIN(S1126) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	ESPL1
Synonyms	ESP1, KIAA0165
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.

Cellular Location Cytoplasm. Nucleus.

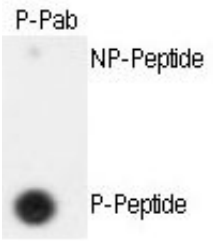
Background

The metaphase-to-anaphase transition is the final discrete event in duplication and separation of the genetic material of the cell. Its timing is regulated by the activation of the anaphase-promoting complex (APC). In both budding and fission yeast, the degradation of the Pds1 or Cut2 protein, respectively, is required for the onset of sister chromatid separation. Both proteins are APC substrates. Pds1 and Cut2 proteins associate with the yeast separin proteins Esp1 and Cut1, respectively, and prevent the separins from promoting chromatid separation. Pds1 and Cut2 are also called anaphase inhibitors or securins

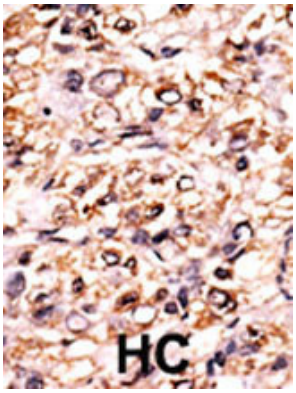
References

Chestukhin, A., et al., Proc. Natl. Acad. Sci. U.S.A. 100(8):4574-4579 (2003).
Waizenegger, I., et al., Curr. Biol. 12(16):1368-1378 (2002).
Chen, F., et al., J. Biol. Chem. 277(19):16775-16781 (2002).
Hauf, S., et al., Science 293(5533):1320-1323 (2001).
Zou, H., et al., Science 285(5426):418-422 (1999).

Images



Dot blot analysis of anti-hSeparase-S801 Phospho-specific Pab (Cat. #AP3247a) on nitrocellulose membrane. 50ng of nonphospho-peptide or phospho-peptide were adsorbed on their respective dots. Antibody working concentration was 0.5ug per ml.



Formalin-fixed and paraffin-embedded human cancer tissue reacted with the primary antibody, which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated. BC = breast carcinoma; HC = hepatocarcinoma.

Citations

- The proteolytic activity of separase in BCR-ABL-positive cells is increased by imatinib.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.