ESPL1 (phospho S1126) polyclonal antibody

Catalog # PAB0608 Size 400 uL

Applications





Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections)

Formalin-fixed and paraffin-embedded human hepatocellular carcinoma tissue reacted with ESPL1 (phospho S1126) polyclonal antibody (Cat # PAB0608) 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. HC = hepatocarcinoma.

Dot Blot (Peptide)

Dot blot analysis of ESPL1 (phospho S1126) polyclonal antibody (Cat # PAB0608) on nitrocellulose membrane. 50 ng of nonphospho-peptide or phospho-peptide were adsorbed on their respective dots.

Specification	
Product Description	Rabbit polyclonal antibody raised against synthetic phosphopeptide of ESPL1.
Immunogen	Synthetic phosphopeptide (conjugated with KLH) corresponding to residues surrounding S1126 of h uman ESPL1.
Host	Rabbit
Reactivity	Human
Form	Liquid
Purification	Protein G purification



Product Information

Recommend Usage	Dot Blot (1:500) Immunohistochemistry (1:50-100) The optimal working dilution should be determined by the end user.
Storage Buffer	In PBS (0.09% sodium azide)
Storage Instruction	Store at 4°C. For long term storage store at -20°C. Aliquot to avoid repeated freezing and thawing.
Note	This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which shoul d be handled by trained staff only.

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Gene Info — ESPL1

Entrez GenelD	9700
Protein Accession#	<u>NP_036423;Q14674</u>
Gene Name	ESPL1
Gene Alias	ESP1, FLJ46492, KIAA0165, SEPARASE, SEPARIN
Gene Description	extra spindle pole bodies homolog 1 (S. cerevisiae)
Omim ID	<u>604143</u>
Gene Ontology	<u>Hyperlink</u>
Gene Summary	Stable cohesion between sister chromatids before anaphase and their timely separation during a naphase are critical for chromosome inheritance. In vertebrates, sister chromatid cohesion is rele ased in 2 steps via distinct mechanisms. The first step involves phosphorylation of STAG1 (MIM 6 04358) or STAG2 (MIM 604359) in the cohesin complex. The second step involves cleavage of th e cohesin subunit SCC1 (RAD21; MIM 606462) by ESPL1, or separase, which initiates the final s eparation of sister chromatids (Sun et al., 2009 [PubMed 19345191]).[supplied by OMIM



Other Designations

extra spindle poles like 1|separin, separase

Publication Reference

 Association of the Timeless Gene with Prognosis and Clinical Characteristics of Human Lung Cancer. Jishi Ye, Jingli Chen, Juan Wang, Zhongyuan Xia, Yifan Jia. Diagnostics (Basel, Switzerland) 2022 Nov; 12(11):2681.

Application: WB-Tr, Human, A549, NCI-H226 cells

- Processing, localization, and requirement of human separase for normal anaphase progression.
 Chestukhin A, Pfeffer C, Milligan S, DeCaprio JA, Pellman D.
 PNAS 2003 Apr; 100(8):4574.
- <u>Regulation of human separase by securin binding and autocleavage.</u>
 Waizenegger I, Gimenez-Abian JF, Wernic D, Peters JM.
 Current Biology 2002 Aug; 12(16):1368.
- <u>Caspase proteolysis of the cohesin component RAD21 promotes apoptosis.</u>

Chen F, Kamradt M, Mulcahy M, Byun Y, Xu H, McKay MJ, Cryns VL. The Journal of Biological Chemistry 2002 Mar; 277(19):16775.

Pathway

<u>Cell cycle</u>

Disease

- Breast cancer
- Breast Neoplasms
- <u>Chromosomal Instability</u>
- Genetic Predisposition to Disease