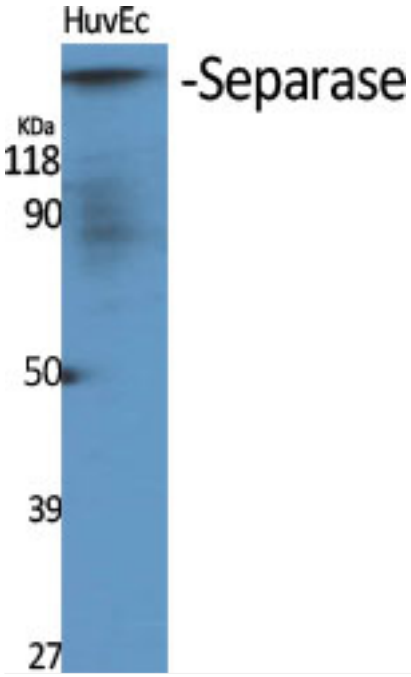
Separase Polyclonal Antibody

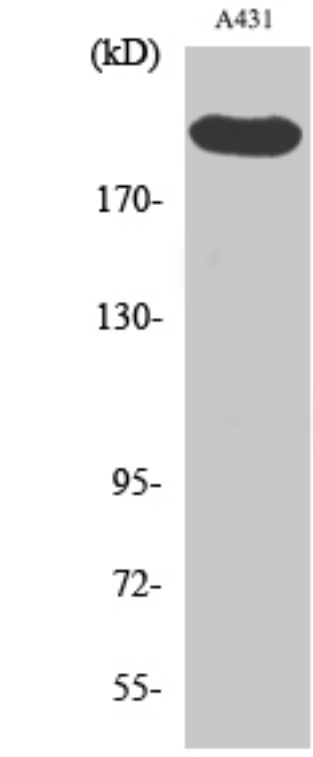
Catalog No	BYab-16775
Isotype	IgG
Reactivity	Human;Mouse
Applications	WB;IHC;IF;ELISA
Gene Name	ESPL1
Protein Name	Separin
Immunogen	The antiserum was produced against synthesized peptide derived from human SEPARASE. AA range:767-816
Specificity	Separase Polyclonal Antibody detects endogenous levels of Separase protein.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Polyclonal, Rabbit,IgG
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. Immunofluorescence: 1/200 - 1/1000. ELISA: 1/40000. Not yet tested in other applications.
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	ESPL1; ESP1; KIAA0165; Separin; Caspase-like protein ESPL1; Extra spindle poles-like 1 protein; Separase
Observed Band	230kD
Cell Pathway	Cytoplasm. Nucleus.
Tissue Specificity	Bone marrow,Epithelium,
Function	catalytic activity:All bonds known to be hydrolyzed by this endopeptidase have arginine in P1 and an acidic residue in P4. P6 is often occupied by an acidic residue or by an hydroxy-amino-acid residue, the phosphorylation of which enhances cleavage.,enzyme regulation:Regulated by at least two independent mechanisms. First, it is inactivated via its interaction with securin/PTTG1, which probably covers its active site. The association with PTTG1 is not only inhibitory, since PTTG1 is also required for activating it, the enzyme being inactive in cells in which PTTG1 is absent. PTTG1 degradation at anaphase, liberates it and triggers RAD21 cleavage. Second, phosphorylation at Ser-1126 inactivates it. The

	complete phosphorylation during mitosis, is removed when cells undergo anaphase. Activation of the enzyme at the metaphase-anaphase transition probably requires the removal of both securin
Background	Stable cohesion between sister chromatids before anaphase and their timely separation during anaphase are critical for chromosome inheritance. In vertebrates, sister chromatid cohesion is released in 2 steps via distinct mechanisms. The first step involves phosphorylation of STAG1 (MIM 604358) or STAG2 (MIM 300826) in the cohesin complex. The second step involves cleavage of the cohesin subunit SCC1 (RAD21; MIM 606462) by ESPL1, or separase, which initiates the final separation of sister chromatids (Sun et al., 2009 [PubMed 19345191]).[supplied by OMIM, Nov 2010],
matters needing attention	Avoid repeated freezing and thawing!
Usage suggestions	This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

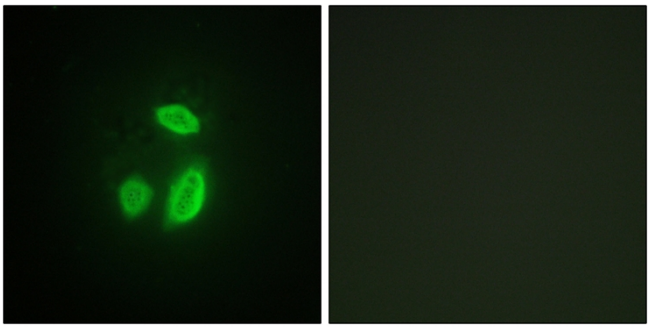
Products Images



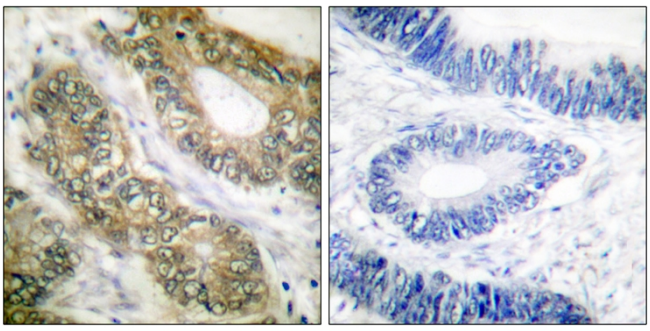
Western Blot analysis of various cells using Separase Polyclonal Antibody diluted at 1:1000



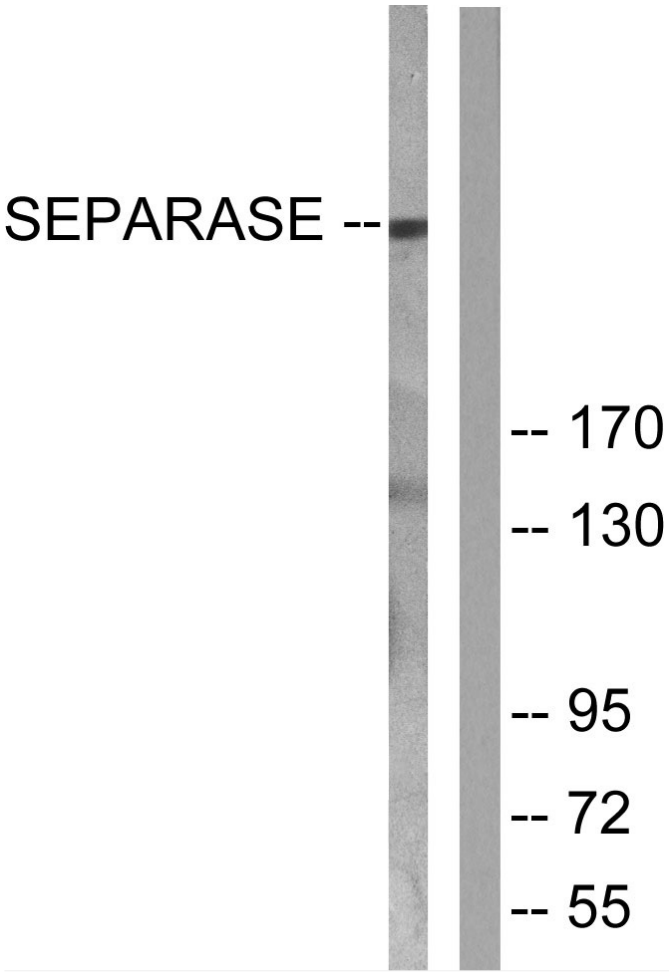
Western Blot analysis of A431 cells using Separase Polyclonal Antibody diluted at 1:1000



Immunofluorescence analysis of HUVEC cells, using SEPARASE Antibody. The picture on the right is blocked with the synthesized peptide.



Immunohistochemistry analysis of paraffin-embedded human colon carcinoma tissue, using SEPARASE Antibody. The picture on the right is blocked with the synthesized peptide.



Western blot analysis of lysates from 293 cells, treated with EGF 200ng/ml 30', using SEPARASE Antibody. The lane on the right is blocked with the synthesized peptide.