

## Rabbit Anti-Anillin/Cy5.5 Conjugated antibody

SL20482R-Cy5.5

<b>Product Name</b>	Anti-Anillin/Cy5.5
<b>Chinese Name</b>	Cy5.5 标记的胞环蛋白肌动蛋白 Binding protein 抗体
<b>Alias</b>	Actin binding protein scraps homolog Drosophila; Actin binding protein anillin; Anillin actin binding protein; ANLN; DKFZp779A055; Scra; Scraps; Scraps homolog.
<b>Research Area</b>	Cell biology Cyclin Binding protein Cytoskeleton
<b>Immunogen Species</b>	Rabbit
<b>Clonality</b>	Polyclonal
<b>React Species</b>	Human,Mouse,Rat(predicted:Dog,Horse) IF=1:100-500
<b>Applications</b>	not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
<b>Molecular weight</b>	124kDa
<b>Form</b>	Lyophilized or Liquid
<b>Concentration</b>	1mg/ml
<b>immunogen</b>	KLH conjugated synthetic peptide derived from human Anillin
<b>Lsotype</b>	IgG
<b>Purification</b>	affinity purified by Protein A
<b>Storage Buffer</b>	1M TBS(pH7.4) with 1% BSA, 3% Proclin300 and 50% Glycerol. 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 1M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
<b>Storage</b>	
<b>Product Detail</b>	<b>background:</b> Anillin, also known as scraps homolog, is an evolutionarily conserved Actin-binding protein required for cytokinesis that was first identified in Drosophila melanogaster. Anillin is a ubiquitously expressed protein with highest expression levels in the central nervous system. It is predominantly found in

the nucleus and it localizes to the cleavage furrow during cytokinesis, forming a ring with the help of Rac GTPase. During cytokinesis, Anillin interacts with CD2AP and functions to concentrate Rho A and maintain the localization of active Myosin. In Anillin knockout cells the cleavage furrow fails to complete ingression. Anillin expression levels fluctuate with the cell cycle, peaking in mitosis. Before the cell exits into G1, Anillin associates with E-cadherin and is ubiquitinated by the anaphase-promoting complex/cyclosome (APC/C). APC/C recognizes the D-box domain at the N-terminal region of Anillin. Anillin is commonly overexpressed in tumors and may serve as a potential biomarker. Anillin is required for cytokinesis. It is essential for the structural integrity of the cleavage furrow and for completion of cleavage furrow ingression.

**Function:**

Required for cytokinesis. Essential for the structural integrity of the cleavage furrow and for completion of cleavage furrow ingression.

**Subunit:**

Interacts with F-actin. Interacts with CD2AP. May interact with RHOA. Interacts with FZR1/CDH1 during mitotic exit.

**Subcellular Location:**

Nucleus. Cytoplasm, cytoskeleton. Cytoplasm, cell cortex. Note=Mainly found in the nucleus during interphase. Colocalizes with cortical F-actin upon nuclear envelope breakdown in mitosis and subsequently concentrates in the area of the prospective contractile ring in anaphase. This pattern persists until telophase, when the protein becomes concentrated in the midbody.

**Tissue Specificity:**

Ubiquitously expressed. Present at highest levels in the brain, at high levels in the placenta and testis, at intermediate levels in the intestine, ovary, skeletal muscle and thymus and at lower levels in heart, kidney, liver, lung, pancreas, prostate and spleen. Overexpressed in many tumor types including breast, colorectal, endometrial, hepatic, kidney, lung, ovarian and pancreatic tumors.

**Post-translational modifications:**

Phosphorylated during mitosis.  
Ubiquitinated, and this requires FZR1/CDH1.

**Similarity:**

Contains 1 PH domain.

**Database links:**



[Entrez Gene: 54443](#) Human

[Entrez Gene: 68743](#) Mouse

[Entrez Gene: 363031](#) Rat

[SwissProt: Q9NQW6](#) Human

[SwissProt: Q8K298](#) Mouse

[Unigene: 62180](#) Human

[Unigene: 282751](#) Mouse

[Unigene: 453238](#) Mouse

**Important Note:**

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