
Anillin Rabbit pAb

Catalog Number: bs-7738R

Target Protein: Anillin

Concentration: 1mg/ml

Form: Liquid

Host: Rabbit

Clonality: Polyclonal

Isotype: IgG

Applications: IHC-P (1:100-500), IHC-F (1:100-500), IF (1:100-500), Flow-Cyt (1ug/test)

Reactivity: Human, Mouse (predicted:Rat, Rabbit, Cow, Dog, Horse)

Predicted MW: 124 kDa

Entrez Gene: 54443

Swiss Prot: Q9NQW6

Source: KLH conjugated synthetic peptide derived from human Anillin: 501-600/1124.

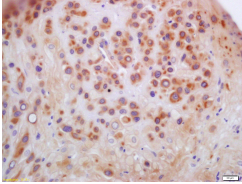
Purification: affinity purified by Protein A

Storage: 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.

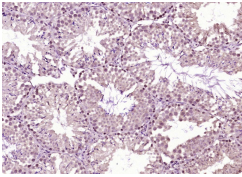
Shipped at 4°C. Store at -20°C for one year. Avoid repeated freeze/thaw cycles.

Background: 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.

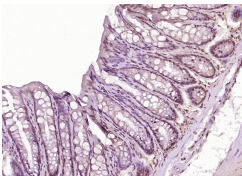
VALIDATION IMAGES



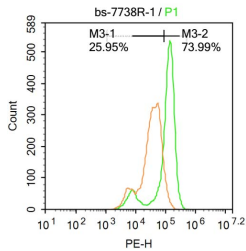
Tissue/cell: human placenta tissue; 4% Paraformaldehyde-fixed and paraffin-embedded; Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum, C-0005) at 37°C for 20 min; Incubation: Anti-Anillin Polyclonal Antibody, Unconjugated (bs-7738R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody (SP-0023) and DAB (C-0010) staining



Paraformaldehyde-fixed, paraffin embedded (Mouse testis); Antigen retrieval by boiling in sodium citrate buffer (pH 6.0) 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 (Anillin) Polyclonal Antibody, Unconjugated (bs-7738R) at 1:400 overnight at 4°C, followed by operating according to SP Kit (Rabbit) (sp-0023) instructions and DAB staining.



Paraformaldehyde-fixed, paraffin embedded (Mouse colon); Antigen retrieval by boiling in sodium citrate buffer (pH 6.0) 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 (Anillin) Polyclonal Antibody, Unconjugated (bs-7738R) at 1:400 overnight at 4°C, followed by operating according to SP Kit (Rabbit) (sp-0023) instructions and DAB staining.



Blank control: A431. Primary Antibody (green line): Rabbit Anti-Anillin antibody (bs-7738R) Dilution: 1 µg / 10⁶ cells; Isotype Control Antibody (orange line): Rabbit IgG. Secondary Antibody: Goat anti-rabbit IgG-AF647 Dilution: 1 µg / test. Protocol The cells were fixed with 4% PFA (10min at room temperature) and then permeabilized with 90% ice-cold methanol for 20 min at -20°C. The cells were then incubated in 5% BSA to block non-specific protein-protein interactions for 30 min at room temperature. Cells stained with Primary Antibody for 30 min at room temperature. The secondary antibody used for 40 min at room temperature. Acquisition of 20,000 events was performed.

PRODUCT SPECIFIC PUBLICATIONS

[IF=5.79] Wang et al. F-actin binding protein, anillin, regulates integrity of intercellular junctions in human epithelial cells. (2015) Cell.Mol.Life.Sci. 72:3185-200 IF ; Human . 25809162

[IF=5.722] Xiao, Yu. et al. ANLN and UBE2T are prognostic biomarkers associated with immune regulation in breast cancer: a bioinformatics analysis. CANCER CELL INT. 2022 Dec;22(1):1-12 IHC ; Human . 10.1186/s12935-022-02611-0