

Goat Anti-ANILLIN / Scraps (internal) Antibody Peptide-affinity purified goat antibody Catalog # AF1062b

Specification

Goat Anti-ANILLIN / Scraps (internal) Antibody - Product Information

Application Primary Accession Other Accession

Reactivity Predicted Host Clonality Concentration Isotype Calculated MW WB, Pep-ELISA <u>O9NQW6</u> NP_061155, 54443, 68743 (mouse), 307056 (rat) Human, Mouse Rat, Dog Goat Polyclonal 100ug/200ul IgG 124199

Goat Anti-ANILLIN / Scraps (internal) Antibody - Additional Information

Gene ID 54443

Other Names Actin-binding protein anillin, ANLN

Dilution WB~~1:1000 Pep-ELISA~~N/A

Format

0.5 mg lgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

Goat Anti-ANILLIN / Scraps (internal) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Goat Anti-ANILLIN / Scraps (internal) Antibody - Protein Information

Name ANLN

Function Required for cytokinesis (PubMed:<a href="http://www.uniprot.org/citations/16040610"



target="_blank">16040610). Essential for the structural integrity of the cleavage furrow and for completion of cleavage furrow ingression. Plays a role in bleb assembly during metaphase and anaphase of mitosis (PubMed:23870127). May play a significant role in podocyte cell migration (PubMed:24676636).

Cellular Location

Nucleus. Cytoplasm, cytoskeleton. Cytoplasm, cell cortex. Cell projection, bleb. 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 Location

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. In the kidney, it is widely expressed in tubules, but sparsely expressed in the glomerulus (PubMed:24676636). Expression is significantly increased in renal biopsy specimens from idiopathic FSGS (PubMed:24676636). Overexpressed in many tumor types including breast, colorectal, endometrial, hepatic, kidney, lung, ovarian and pancreatic tumors.

Goat Anti-ANILLIN / Scraps (internal) Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

Goat Anti-ANILLIN / Scraps (internal) Antibody - Images

250kDa 150kDa 100kDa
75kDa
50kDa
37kDa
25kDa
20kDa
15kDa
10kDa

AF1062b (1 μ g/ml) staining of Mouse Brain lysate (35 μ g protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.





EB07300 Immunofluorescence analysis of paraformaldehyde fixed NIH3T3 cells, permeabilized with 0.15% Triton. Primary incubation 1hr (10ug/ml) followed by Alexa Fluor 488 secondary antibody (2ug/ml), showing nuclear and cytoplasmic staining. The nuclear stain is DAPI (blue). Negative control: Unimmunized goat IgG (10ug/ml) followed by Alexa Fluor 488 secondary antibody (2ug/ml).



EB07300 Immunofluorescence analysis of paraformaldehyde fixed Neuro-2a cells, permeabilized with 0.15% Triton. Primary incubation 1hr (10ug/ml) followed by Alexa Fluor 488 secondary antibody (2ug/ml), showing nuclear staining. The nuclear stain is DAPI (blue). Negative control: Unimmunized goat IgG (10ug/ml) followed by Alexa Fluor 488 secondary antibody (2ug/ml).

Goat Anti-ANILLIN / Scraps (internal) Antibody - References

NBL1 and anillin (ANLN) genes over-expression in pancreatic carcinoma. Olakowski M, et al. Folia Histochem Cytobiol, 2009. PMID 19995712.

Anillin is a scaffold protein that links RhoA, actin, and myosin during cytokinesis. Piekny AJ, et al. Curr Biol, 2008 Jan 8. PMID 18158243.

Systematic analysis of the protein interaction network for the human transcription machinery reveals the identity of the 7SK capping enzyme. Jeronimo C, et al. Mol Cell, 2007 Jul 20. PMID 17643375.

Global, in vivo, and site-specific phosphorylation dynamics in signaling networks. Olsen JV, et al. Cell, 2006 Nov 3. PMID 17081983.



A probability-based approach for high-throughput protein phosphorylation analysis and site localization. Beausoleil SA, et al. Nat Biotechnol, 2006 Oct. PMID 16964243.