

Alexa Fluor[®] 594 anti-Cytokeratin 17 Antibody

Catalog# / Size	697203 / 25 µg 697204 / 100 µg
Clone	W16131A
Regulatory Status	RUO
Other Names	Keratin, type I cytoskeletal 17, keratin-17 (K-17), cytokeratin-17 (CK-17), KRT17, CK17, K17
Isotype	Rat IgG2b, κ
Description	Cytokeratin 17 (CK-17), also known as KRT17 or keratin-17 (K-17), is a type I intermediate filament protein. KRT expression is normally restricted to ectoderm-derived epithelial appendages such as thymus, glands, skin, hair, tooth, nail, and the endocervical mucosa. Cytokeratin-17 participates in promoting protein synthesis and cell growth through recruiting stratifin (SFN) to the cytoplasm and stimulating the Akt/mTOR pathway. Cytokeratin-17 was found to regulate chemokine expression, including the CXCR3 ligands CXCL9, CXCL10, and CXCL11. Cytokeratin 17 expression can be upregulated in response to chemical stimulation, wounding, and UV irradiation. Increased expression of Cytokeratin 17 is associated with lesion progression and poor prognosis in epithelial carcinoma. Cytokeratin 17 deficient mice show a delay in wound healing and attenuated tumorigenesis.

Product Details

Verified Reactivity	Human
Antibody Type	Monoclonal
Host Species	Rat
Immunogen	Human Cytokeratin 17 peptide (415-432 a.a.) conjugated to KLH
Formulation	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.
Preparation	The antibody was purified by affinity chromatography and conjugated with Alexa Fluor [®] 594 under optimal conditions.
Concentration	0.5 mg/ml
Storage & Handling	The antibody solution should be stored undiluted between 2°C and 8°C, and protected from prolonged exposure to light. Do not freeze.
Application	ICC - Quality tested
Recommended Usage	<p>Each lot of this antibody is quality control tested by immunocytochemistry. For immunocytochemistry, a concentration range of 0.2 - 2.0 µg/ml (1:250 - 1:2500) is recommended. It is recommended that the reagent be titrated for optimal performance for each application.</p> <p>* Alexa Fluor[®] 594 has an excitation maximum of 590 nm, and a maximum emission of 617 nm.</p> <p>Alexa Fluor[®] and Pacific Blue™ are trademarks of Life Technologies Corporation.</p> <p>View full statement regarding label licenses</p>
Application Notes	<p>This clone does not cross-react with mouse (in-house tested).</p> <p>As per the Human Protein Atlas RNA level dataset, A549 cell is expected to have a low level of Cytokeratin 17 expression.</p>
RRID	AB_2721375 (BioLegend Cat. No. 697203) AB_2721376 (BioLegend Cat. No. 697204)

Antigen Details

Structure	432 amino acids with a predicted molecular weight of 48 kD. Belongs to the type-I intermediate filament family.
Distribution	Cytoplasm
Function	Cytokeratin 17 is a type I intermediate filament protein and is involved in promoting cell growth, chemokine production, and tumorigenesis.
Interaction	Forms a heterodimer with a type I or a type II keratin. Interacts with TRADD and SFN.
Biology Area	Cancer Biomarkers, Cell Biology, Cell Motility/Cytoskeleton/Structure, Neuroscience, Neuroscience Cell Markers
Molecular Family	Intermediate Filaments
Antigen References	<ol style="list-style-type: none"> 1. Hobbs RP, <i>et al.</i> 2016. <i>Oncogene</i>. 35:5653. 2. Escobar-Hoyos LF, <i>et al.</i> 2015. <i>Cancer Res</i>. 75:3650. 3. Chung BM, <i>et al.</i> 2015. <i>J. Cell. Biol.</i> 208:613. 4. Sankar S, <i>et al.</i> 2013. <i>Mol. Cell. Biol.</i> 33:4448. 5. Jin L, <i>et al.</i> 2014. <i>Med. Res. Rev.</i> 34:438. 6. Depianto D, <i>et al.</i> 2010. <i>Nat. Genet.</i> 42:910.
Gene ID	3872

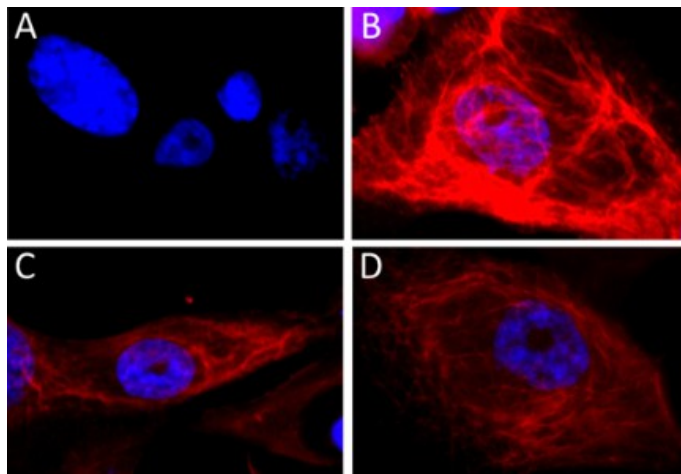
Related Protocols

[Immunocytochemistry Staining Protocol](#)

Other Formats

Purified anti-Cytokeratin 17, Alexa Fluor® 594 anti-Cytokeratin 17, Alexa Fluor® 647 anti-Cytokeratin 17, Alexa Fluor® 488 anti-Cytokeratin 17

Product Data



A431 cells were fixed with 4% paraformaldehyde (PFA) for 10 minutes, permeabilized with 0.5% Triton X-100 for 3 minutes, and blocked with 5% FBS for 60 minutes. Then the cells were intracellularly stained overnight at 4 degrees with (A) 1: 250 diluted (2 µg/ml) Alexa Fluor® 594 Rat IgG2b (Cat. No. 400661) or with Alexa Fluor® 594 anti-Cytokeratin 17 antibody (red) at 1: 250 (2 µg/ml, Figure B), 1: 1000 (0.5 µg/ml, Figure C) and 1: 2500 (0.2 µg/ml, Figure D) dilution. Nuclei were counterstained with DAPI (blue). The image was captured with a 60X objective.

For research use only. Not for diagnostic use. Not for resale. BioLegend will not be held responsible for patent infringement or other violations that may occur with the use of our products.

*These products may be covered by one or more Limited Use Label Licenses (see the BioLegend Catalog or our website, www.biolegend.com/ordering#license). BioLegend products may not be transferred to third parties, resold, modified for resale, or used to manufacture commercial products, reverse engineer functionally similar materials, or to provide a service to third parties without written approval of BioLegend. By use of these products you accept the terms and conditions of all applicable Limited Use Label Licenses. Unless otherwise indicated, these products are for research use only and are not intended for human or animal diagnostic, therapeutic or commercial use.

BioLegend Inc., 8999 BioLegend Way, San Diego, CA 92121 www.biolegend.com
Toll-Free Phone: 1-877-Bio-Legend (246-5343) Phone: (858) 768-5800 Fax: (877) 455-9587

