bs-1712R **[Primary Antibody]**

pan CK | pan Cytokeratin Rabbit pAb

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DATASHEET

Host: Rabbit **Isotype:** IgG

Clonality: Polyclonal

Target: pan CK | pan Cytokeratin

Immunogen: KLH conjugated synthetic peptide derived from human Cytokeratin-1: 141-240/644.

Purification: affinity purified by Protein A

Concentration: 1mg/ml

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: Keratins are a large family of proteins that form the intermediate filament cytoskeleton of epithelial cells, which are classified into two major sequence types. Type I keratins are a group of acidic intermediate filament proteins, including K9–K23, and the hair keratins Ha1–Ha8. Type II keratins are the basic or neutral courterparts to the acidic type I keratins, including K1–K8, and the hair keratins, Hb1–Hb6. In the cytoplasm, the keratin filaments conform a complex network which extends from the surface of the nucleus to the cell membrane. Apart from the relatively static functions provided in terms of supporting the nucleus and providing tensile strength to the cell, the cytokeratin networks undergo rapid phosphate exchanges mediated depolymerization, with important implications in the more dynamic cellular processes such as mitosis and post-mitotic period, cell movement and differentiation.
Cytokeratin pan is part of a subfamily of intermediate filament proteins that are characterized by remarkable biochemical diversity, and represented in human epithelial tissues by at least 20 different polypeptides. Cytokeratins range in molecular weight between 40 kDa- 68 kDa, and an isoelectric pH between 4.9-7.8. The individual human cytokeratins are numbered 1 to 20. The various epithelia in the human body usually express cytokeratins which are not only characteristic of the type of epithelium, but also related to the degree of maturation or differentiation within an epithelium. Cytokeratin subtype expression patterns are used to an increasing extent in the distinction of different types of epithelial malignancies. The cytokeratin antibodies are not only of assistance in the differential diagnosis of tumors using immunohistochemistry on tissue sections, but are also a useful tool in cytopathology and flow cytometric assays. The composition of cytokeratin pairs vary with the epithelial cell type, stage of differentiation, cellular growth environment, and disease state. Many studies have shown the usefulness of keratins as markers in cancer research and tumor diagnosis.

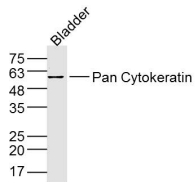
Applications: **WB** (1:500-2000)
IHC-P (1:100-500)
IHC-F (1:100-500)
IF (1:100-500)
Flow-Cyt (1μg /test)
ICC/IF (1:100-500)

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

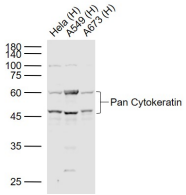
Predicted MW.: 42-64 kDa

Observed MW.: 46,60 kDa

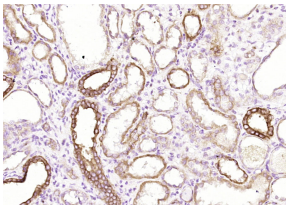
VALIDATION IMAGES



Sample:Bladder (Mouse) Lysate at 40 ug Primary: Anti-Pan Cytokeratin (bs-1712R) at 1/300 dilution Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution Predicted



Sample: Lane 1: Hela (Human) Cell Lysate at 30 ug Lane 2: A549 (Human) Cell Lysate at 30 ug Lane 3: A673 (Human) Cell Lysate at 30 ug Primary: Anti-Pan Cytokeratin (bs-1712R) at



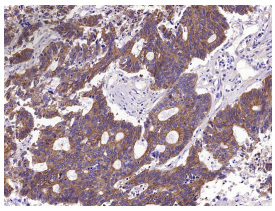
Paraformaldehyde-fixed, paraffin embedded (Human kidney); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen

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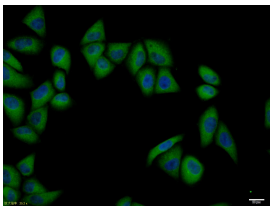
band size: 42-64 kD Observed band size: 60 kD

1/1000 dilution Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution Predicted band size: 42-64 kD Observed band size: 46,60 kD

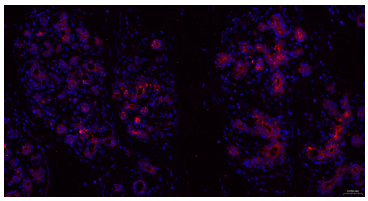
peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (Pan Cytokeratin) Polyclonal Antibody, Unconjugated (bs-1712R) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructionsand DAB staining.



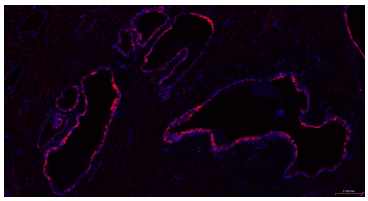
Paraformaldehyde-fixed, paraffin embedded (Human stomach carcinoma); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (Pan Cytokeratin) Polyclonal Antibody, Unconjugated (bs-1712R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructionsand DAB staining.



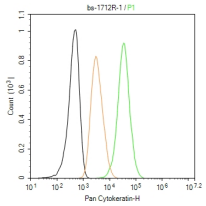
Hela cell; 4% Paraformaldehyde-fixed; Triton X-100 at room temperature for 20 min; Blocking buffer (normal goat serum, C-0005) at 37°C for 20 min; Antibody incubation with (Pan Cytokeratin) polyclonal Antibody, Unconjugated (bs-1712R) 1:100, 90 minutes at 37°C; followed by a conjugated Goat Anti-Rabbit IgG antibody at 37°C for 90 minutes, DAPI (blue, C02-04002) was used to stain the cell nuclei.



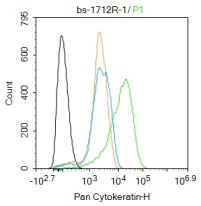
Paraformaldehyde-fixed, paraffin embedded Human Breast Cancer; Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15 min; The section was incubated with Pan Cytokeratin Polyclonal Antibody, Unconjugated (bs-1712R) at 1:200 overnight at 4°C. Followed by conjugated Goat Anti-Rabbit IgG antibody (Red, bs-0295G-BF594), DAPI (blue, C02-04002) was used to stain the cell nuclei.



Paraformaldehyde-fixed, paraffin embedded Human Prostate; Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15 min; The section was incubated with Pan Cytokeratin Polyclonal Antibody, Unconjugated (bs-1712R) at 1:200 overnight at 4°C. Followed by conjugated Goat Anti-Rabbit IgG antibody (Red, bs-0295G-BF594), DAPI (blue, C02-04002) was used to stain the cell nuclei.



The HeLa (H) cells were fixed with 4% PFA (10 min at r.t.) and then permeabilized with 90% ice-cold methanol for 20 min at -20°C,the cells then were incubated in 5%BSA to block non-specific protein-protein interactions (30 min at r.t.). Cells stained with Primary Antibody for 30 min at room temperature,followed by secondary antibody incubation for 40 min at room temperature. Primary Antibody (green):Rabbit Anti-Pan Cytokeratin antibody (bs-1712R,1:100); Isotype Control (orange): Rabbit IgG (bs-0295P). Blank control (black): PBS. Acquisition of 20,000 events was performed.



Blank control（black line）:A549. Primary Antibody (green line): Rabbit Anti-Pan Cytokeratin antibody (bs-1712R) Dilution:1ug/Test; Secondary Antibody（white blue line）: Goat anti-rabbit IgG-BF488 Dilution: 0.5ug/Test. Isotype control（orange line）: Normal Rabbit IgG 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.

SELECTED CITATIONS

- **[IF=42.5]** Lanqi Gong. et al. Cancer immunology data engine reveals secreted AOAH as a potential immunotherapy. CELL. 2025 Jul mIF ;Mouse. 40730154
- **[IF=18.952]** Mahmoud Labibet al. Tracking the expression of therapeutic protein targets in rare cells by antibody-mediated nanoparticle labelling and magnetic sorting. Nat Biomed Eng . 2020 Jul 27. FCM ;Human. 32719513
- **[IF=15.8]** Shan Yu. et al. Nanosized Shikonin Disrupts Tumor-Cell Mismatch Repair and Synergizes with Manganese to Sensitize Squamous Carcinoma to Immunotherapy. ACS NANO. 2025;XXXX(XXX):XXX-XXX mIHC ;Mouse. 40190094
- **[IF=15.7]** Baek Eun Bok. et al. Vitamin D supplementation ameliorates ductular reaction, liver inflammation and fibrosis in mice by upregulating TXNIP in ductular cells. NAT COMMUN. 2025 May;16(1):1-17 IHC ;Mouse,Human. 40360509

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- **[IF=13.3]** Enhang Lu. et al. Establishment of human minor salivary gland organoids in laminin-GelMA hydrogel from healthy individuals and Sjögren’ s disease patients. CHEM ENG J. 2025 Jan;503:158257 IF ;Human. 10.1016/j.cej.2024.158257

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