Antibodies

Anti-Human Cytokeratin 20 Antibody, Polyclonal

Rabbit polyclonal antibody against human, mouse, rat cytokeratin 20

Catalog #100-1064

100 µg

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Product Description

This rabbit polyclonal antibody reacts with cytokeratin 20, a low molecular weight, type I cytokeratin that is a major component of mature enterocytes and goblet cells. Cytokeratin 20 is expressed primarily in the gastrointestinal (GI) epithelium, urothelium, and Merkel cells and serves as a marker of GI differentiation. The cytokeratin 20 protein is responsible for the structural integrity of epithelial cells and maintains the intermediate filament organization in the intestinal epithelia. Cytokeratin 20 is also a useful marker of pancreatic and colorectal cancer and has been detected in adenocarcinomas of the colon, pancreas, stomach, and biliary tract. Expression of cytokeratin 20 has also been associated with the progression and metastasis of breast cancer, suggesting that it may be a biomarker in predicting breast cancer prognosis.

Target Antigen Name:	Cytokeratin 20
Alternative Names:	CK20, K20, KRT20, keratin 20
Gene ID:	54474
Species Reactivity:	Human, Mouse, Rat
Host Species:	Rabbit
Clonality:	Polyclonal
Clone:	Not applicable
Isotype:	Not applicable
Immunogen:	Synthesized peptide derived from the C-terminal region of human cytokeratin 20
Conjugate:	Unconjugated

Applications

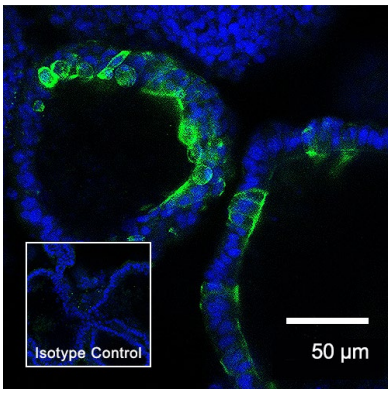
Verified:	ICC/IF
Reported:	ICC/IF, IHC, WB
Special Applications:	This antibody clone has been verified for labeling cytokeratin 20-positive intestinal epithelial cells in human intestinal organoids grown using the STEMdiff™ Intestinal Organoid Kit (Catalog #05140).

Abbreviations: CellSep: Cell separation; ChIP: Chromatin immunoprecipitation; FA: Functional assay; FACS: Fluorescence-activated cell sorting; FC: Flow cytometry; ICC: Immunocytochemistry; IF: Immunofluorescence microscopy; IHC: Immunohistochemistry; IHC-P: Immunohistochemistry (paraffin-embedded); IP: Immunoprecipitation; RIA: Radioimmunoassay; WB: Western blotting

Properties

Formulation:	Phosphate-buffered saline containing 0.02% sodium azide, 50% glycerol, and 0.5% bovine serum albumin
Purification:	The antibody was purified by affinity chromatography.
Stability and Storage:	Product stable at -20°C when stored undiluted. Stable until expiry date (EXP) on label.
Directions for Use:	The suggested use of this antibody is: ICC/IF, 2.5 µg/mL; IHC, 1:100 - 1:300; WB, 1:500 - 1:2000. It is recommended that the antibody be titrated for optimal performance for each application.

Data



H9 human intestinal organoids were cultured using STEMdiff™ Intestinal Organoid Kit (Catalog #05140), then fixed and labeled with Anti-Human Cytokeratin 20 Antibody, Polyclonal, followed by Goat Anti-Rabbit IgG (H+L) Antibody, Polyclonal, iFluor™ 488 (Catalog #100-1082). Nuclei were counter-stained with DAPI (blue). Inset shows cells labeled with a rabbit IgG isotype control antibody, followed by Goat Anti-Rabbit IgG (H+L) Antibody, Polyclonal, iFluor™ 488 (with DAPI staining).

Related Products

For a complete list of antibodies, including other conjugates, sizes, and clones, as well as related products available from STEMCELL Technologies, visit www.stemcell.com/antibodies, or contact us at techsupport@stemcell.com.

References

1. Lin S et al. (2019) The mitochondrial deoxyguanosine kinase is required for cancer cell stemness in lung adenocarcinoma. EMBO Mol Med 11(12): e10849. (ICC/IF)
2. Zhu P et al. (2018) LncGata6 maintains stemness of intestinal stem cells and promotes intestinal tumorigenesis. Nat Cell Biol 20(10): 1134–44. (WB)
3. Wang Y et al. (2017) A microengineered collagen scaffold for generating a polarized crypt-villus architecture of human small intestinal epithelium. Biomaterials 128: 44–55. (IF)
4. Zhang Y et al. (2017) DC - SIGNR by influencing the lncRNA HNRNPKP2 upregulates the expression of CXCR4 in gastric cancer liver metastasis. Mol Cancer 16(78): 1–16. (IHC)