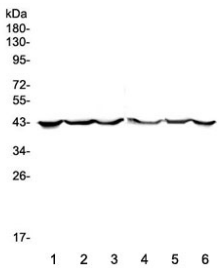
# CK19 Antibody / Cytokeratin 19 (R31920)

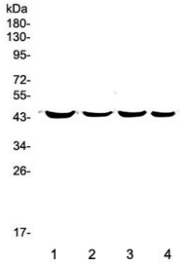
| Catalog No. | Formulation | Size |
|---|---|---|
| R31920 | 0.5mg/ml if reconstituted with 0.2ml sterile DI water | 100 ug |

**Bulk quote request**

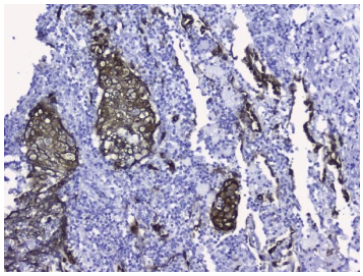
| | |
|---|---|
| **Availability** | 1-3 business days |
| **Species Reactivity** | Human, Mouse, Rat |
| **Format** | Antigen affinity purified |
| **Clonality** | Polyclonal (rabbit origin) |
| **Isotype** | Rabbit IgG |
| **Purity** | Antigen affinity |
| **Buffer** | Lyophilized from 1X PBS with 2.5% BSA and 0.025% sodium azide |
| **UniProt** | P08727 |
| **Localization** | Cytoplasmic |
| **Applications** | Western Blot : 0.1-0.5ug/ml<br>Immunohistochemisty (FFPE) : 0.5-1ug/ml<br>Immunofluorescence : 5ug/ml<br>Flow Cytometry : 1-3ug/million cells |
| **Limitations** | This CK19 antibody is available for research use only. |



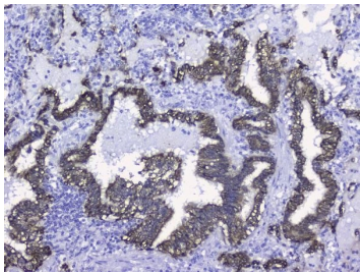

Western blot testing of human 1) placenta, 2) MCF7, 3) SW620, 4) COLO-320, 5) HepG2 and 6) PANC-1 lysate with CK19 antibody. Expected molecular weight ~43 kDa.




Western blot testing of 1) rat lung, 2) rat small intestine, 3) mouse lung and 4) mouse HEPA1-6 lysate with CK19 antibody. Expected molecular weight ~43 kDa.



IHC testing of FFPE human lung cancer tissue with CK19 antibody. HIER: Boil the paraffin sections in pH 6, 10mM citrate buffer for 20 minutes and allow to cool prior to staining.



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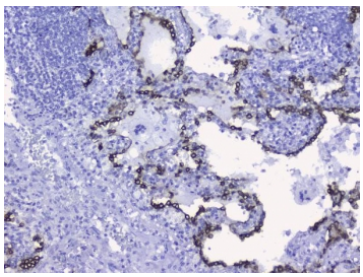

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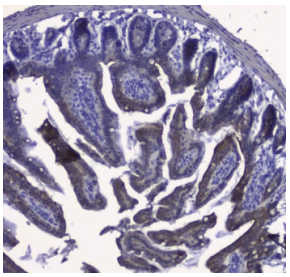
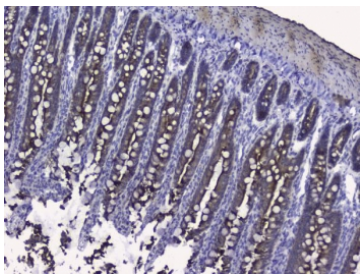
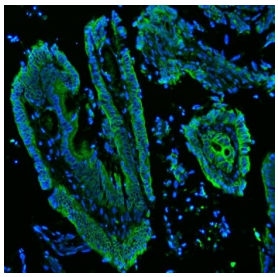


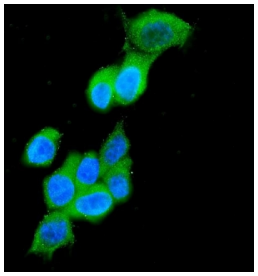
IHC testing of FFPE mouse small intestine with CK19 antibody. HIER: Boil the paraffin sections in pH 6, 10mM citrate buffer for 20 minutes and allow to cool prior to staining.



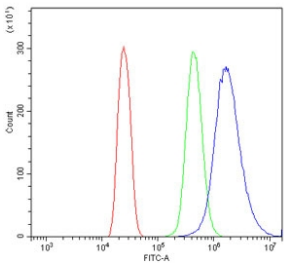
IHC testing of FFPE rat small intestine with CK19 antibody. HIER: Boil the paraffin sections in pH 6, 10mM citrate buffer for 20 minutes and allow to cool prior to staining.



Immunofluorescent staining of FFPE human colon cancer with CK19 antibody (green) and DAPI nuclear stain (blue). HIER: steam section in pH8 EDTA buffer for 20 min.



Immunofluorescent staining of FFPE human MCF7 cells with CK19 antibody (green) and DAPI nuclear stain (blue). HIER: steam section in pH6 citrate buffer for 20 min.




Flow cytometry testing of human MCF7 cells with CK19 antibody at 1ug/million cells (blocked with goat sera); Red=cells alone, Green=isotype control, Blue= CK19 antibody.

## Description

Cytokeratin 19, also called Keratin 19 and CK19, is a protein that in humans is encoded by the KRT19 gene. The protein encoded by this gene is a member of the keratin family. It is specifically expressed in the periderm, the transiently superficial layer that envelops the developing epidermis. The type I cytokeratins are clustered in a region of chromosome 17q12-q21. Due to its high sensitivity, CK19 is the most used marker for the RT-PCR-mediated detection of tumor cells disseminated in lymph nodes, peripheral blood, and bone marrow of breast cancer patients. Keratin 19 is often used together with keratin 8 and keratin 18 to differentiate cells of epithelial origin from hematopoietic cells in tests that enumerate circulating tumor cells in blood.

## Application Notes

Optimal dilution of the CK19 antibody should be determined by the researcher.

## Immunogen

Amino acids QLAHIQALISGIEAQLGDVRADSERQNQEYQRLMDIKSR of human KRT19 were used as the immunogen for the CK19 antibody.

## Storage

After reconstitution, the CK19 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.