Cytokeratin 14 Antibody [clone LL002] (V2175)

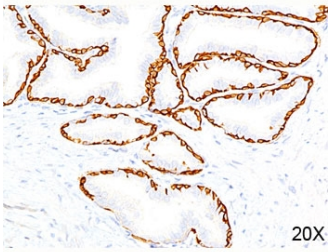
Catalog No.	Formulation	Size
V2175-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V2175-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V2175SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug
V2175IHC-7ML	Prediluted in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide; *For IHC use only*	7 ml

Citations (10)

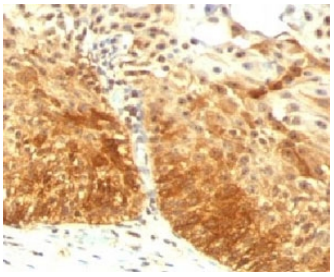
Bulk quote request

Species Reactivity	Human, Mouse, Rat
Format	Purified
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG3, kappa
Clone Name	LL002
Purity	Protein G affinity chromatography
Buffer	1X PBS, pH 7.4
Gene ID	3861
Localization	Cytoplasmic
Applications	Flow Cytometry : 1-2ug/million cells Immunofluorescence : 1-3ug/ml Immunohistochemistry (FFPE) : 1-2ug/ml for 30 min at RT Western Blot : 2-4ug/ml
Limitations	This **Cytokeratin 14 antibody** is available for research use only.

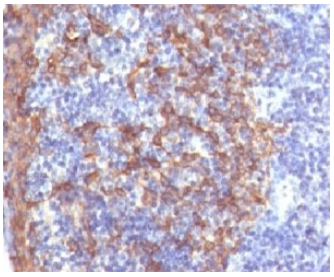
IHC testing of human prostate (10X) stained with Cytokeratin 14 antibody (LL002).



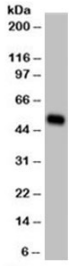
IHC testing of human prostate (20X) stained with Cytokeratin 14 antibody (LL002).



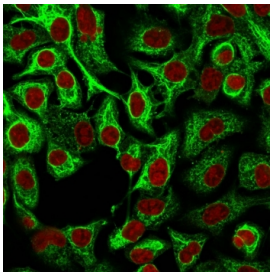
IHC testing of FFPE human prostate with Cytokeratin 14 antibody



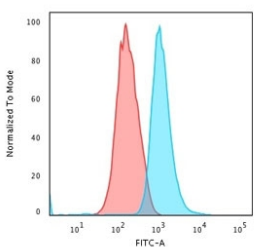
IHC testing of FFPE human prostate with Cytokeratin 14 antibody



Western blot testing of A431 cell lysate (epidermoid carcinoma) and Cytokeratin 14 antibody (clone LL002) at 1ug/ml. Predicted/observed molecular weight: ~53kDa.



Immunofluorescent staining of human A549 cells with Cytokeratin 14 antibody (clone LL002, green) and Reddot nuclear stain (red).



Flow cytometry staining of methanol-fixed human HeLa cells with Cytokeratin 14 antibody; Red=isotype control, Blue= Cytokeratin 14 antibody.

Description

Cytokeratin 14 antibody clone LL002 is a monoclonal antibody that detects cytokeratin 14, a type I intermediate filament protein expressed in the basal layer of stratified squamous epithelia. Cytokeratin 14 pairs with cytokeratin 5 to form structural filaments that provide mechanical support and stability to basal keratinocytes. Because of its restricted expression in the basal compartment of the epidermis, cytokeratin 14 serves as an important marker of epithelial differentiation and basal cell identity. NSJ Bioreagents provides Cytokeratin 14 antibody clone LL002 as a dependable reagent for research in epithelial biology, dermatology, and tumor pathology.

Cytokeratin 14 antibody clone LL002 is widely used in immunohistochemistry to visualize basal keratinocytes in skin, oral mucosa, and other stratified epithelia. It produces distinct cytoplasmic staining in basal cells, making it a standard marker for identifying this cell population. In tumor pathology, cytokeratin 14 detection is valuable for classifying squamous cell carcinomas and distinguishing basal cell carcinomas from other neoplasms. Its staining pattern reflects the basal origin of many epithelial tumors and helps pathologists in diagnostic interpretation.

Beyond tumor diagnostics, cytokeratin 14 antibody clone LL002 is used to study epithelial regeneration and wound healing. Basal keratinocytes expressing cytokeratin 14 proliferate and migrate during reepithelialization, restoring the integrity of the skin barrier. This antibody provides a clear readout of these dynamic processes in both experimental models and clinical samples.

Cytokeratin 14 is also of interest in stem cell biology. The basal keratinocyte population contains progenitor cells capable of giving rise to the differentiated suprabasal layers of the epidermis. Cytokeratin 14 antibody clone LL002 helps track these progenitors and their contributions to tissue maintenance and regeneration.

Validated for immunohistochemistry, immunofluorescence, and western blotting, cytokeratin 14 antibody clone LL002 produces reliable signals with minimal background. It has been cited in numerous studies spanning skin biology, epithelial stem cell research, and carcinoma pathology. Alternate names include CK14 antibody, keratin 14 antibody, and keratin type I cytoskeletal 14 antibody.

Application Notes

The concentration stated for each application is a general starting point. Variations in protocols, secondaries and substrates may require the antibody to be titered up or down for optimal performance.

1. Staining of formalin-fixed tissues requires boiling tissue sections in 10mM Citrate Buffer, pH 6.0, for 10-20 min followed by cooling at RT for 20 minutes.
2. The prediluted format is supplied in a dropper bottle and is optimized for use in IHC. After epitope retrieval step (if required), drip mAb solution onto the tissue section and incubate at RT for 30 min.

Immunogen

A synthetic peptide of 15 amino acid from the C-terminus of human Cytokeratin 14 was used as the immunogen.

Storage

Store the Cytokeratin 14 antibody at 2-8oC (with azide) or aliquot and store at -20oC or colder (without azide).

References (1)