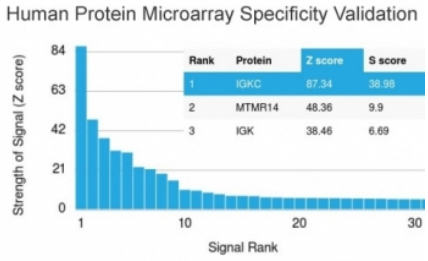
Kappa Light Chain Antibody / Human / CF488 Conjugate [clone KLC709] (V2150CF488)

Catalog No.	Formulation	Size
V2150CF488-100T	500 ul at 0.1 mg/ml with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 Tests

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human
Format	CF488 Conjugate
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG1, kappa
Clone Name	KLC709
Purity	Protein G affinity chromatography
Applications	Immunohistochemistry (FFPE) : 1-2ug/ml
Limitations	This Kappa Light Chain antibody is available for research use only.



Analysis of HuProt(TM) microarray containing more than 19,000 full-length human proteins using anti-Kappa light chain antibody (clone KLC709). These results demonstrate the foremost specificity of the KLC709 mAb.
Z- and S- score: The Z-score represents the strength of a signal that an antibody (in combination with a fluorescently-tagged anti-IgG secondary Ab) produces when binding to a particular protein on the HuProt(TM) array. Z-scores are described in units of standard deviations (SD's) above the mean value of all signals generated on that array. If the targets on the HuProt(TM) are arranged in descending order of the Z-score, the S-score is the difference (also in units of SD's) between the Z-scores. The S-score therefore represents the relative target specificity of an Ab to its intended target.

Description

Kappa Light Chain antibody CF488 conjugate clone KLC709 combines the specificity of clone KLC709 with direct labeling using CF488, a bright green fluorescent dye. This conjugation provides intense and stable fluorescence while eliminating the need for secondary antibodies, making it ideal for flow cytometry, immunofluorescence, and confocal microscopy. NSJ Bioreagents offers this CF488 conjugated antibody to give researchers a dependable option for sensitive and efficient detection of kappa light chains in both tissue and cell based assays.

In diagnostic applications, Kappa Light Chain antibody CF488 conjugate clone KLC709 is used to assess plasma cell

clonality in multiple myeloma and related disorders. By directly labeling kappa producing cells, the antibody allows for clear visualization of light chain restriction, distinguishing monoclonal expansions from polyclonal responses. Its bright green signal ensures accurate identification even when kappa expression levels are low or when samples contain mixed cell populations.

In kidney pathology, the antibody has proven useful for identifying kappa light chain deposits in renal tissue. The CF488 conjugate highlights deposits in glomeruli, tubules, and blood vessels, supporting diagnoses of monoclonal light chain related kidney diseases. Its strong fluorescence allows pathologists and researchers to assess patterns of deposition that correlate with clinical outcomes.

Beyond diagnostics, Kappa Light Chain antibody CF488 conjugate clone KLC709 is applied in immunology research to study B cell development and antibody responses. Because kappa chains are predominant in circulating immunoglobulins, detecting them provides insight into immune activation during infection, vaccination, and autoimmune disease. The CF488 conjugation makes this antibody especially valuable in multicolor flow cytometry, where it pairs well with red and blue fluorochromes in complex experimental panels.

The CF488 dye provides excellent brightness, stability, and resistance to photobleaching, ensuring strong signals during long imaging sessions. This direct conjugation reduces assay complexity while maintaining high specificity for kappa light chains. Alternate names include Ig kappa antibody CF488, immunoglobulin kappa chain antibody CF488, and antibody kappa light chain marker CF488.

Application Notes

Optimal dilution of the Kappa Light Chain antibody should be determined by the researcher.

Immunogen

Recombinant human Kappa light chain was used as the immunogen for this Kappa light chain antibody.

Storage

Store the Kappa Light Chain antibody at 2-8oC, protected from light.