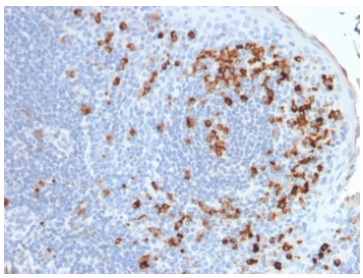
Recombinant Kappa Antibody [clone rKLC264] (V3606)

Catalog No.	Formulation	Size
V3606-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V3606-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V3606SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug
V3606IHC-7ML	Prediluted in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide; *For IHC use only*	7 ml

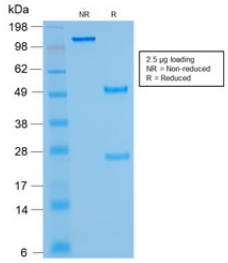
Recombinant MOUSE MONOCLONAL

Bulk quote request

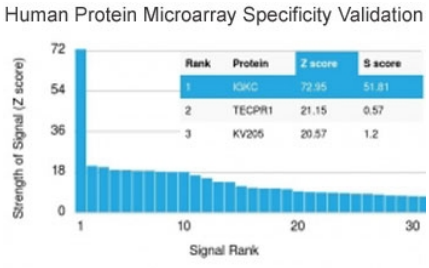
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Recombinant Mouse Monoclonal
Isotype	Mouse IgG1, kappa
Clone Name	rKLC264
Purity	Protein G affinity chromatography
UniProt	P01601, P01834
Localization	Cell Surface, cytoplasmic and secreted
Applications	Immunohistochemistry (FFPE) : 1-2ug/ml for 30 min at RT
Limitations	This recombinant Kappa antibody is available for research use only.



IHC testing of FFPE human tonsil tissue with recombinant Kappa antibody (clone rKLC264). Required HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 10-20 min followed by cooling at RT for 20 min.



SDS-PAGE analysis of purified, BSA-free recombinant Kappa antibody (clone rKLC264) as confirmation of integrity and purity.



Analysis of HuProt(TM) microarray containing more than 19,000 full-length human proteins using recombinant Kappa antibody (clone rKLC264). These results demonstrate the foremost specificity of the rKLC264 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

Recombinant Kappa antibody is a dependable reagent for detecting immunoglobulin kappa light chains, one of the two types of antibody light chains that pair with heavy chains to form intact immunoglobulins. Kappa chains, encoded by the IGKC gene, are expressed in a majority of human antibodies and play a central role in antigen recognition. The ability to distinguish kappa from lambda light chains is critical in immunology, hematology, and pathology research.

Antibody molecules consist of two heavy chains and two light chains, with light chains classified as either kappa or lambda. The variable domain of the kappa chain contributes directly to antigen binding, while its constant domain helps stabilize antibody structure. In clinical settings, altered kappa to lambda ratios can indicate plasma cell disorders, making kappa chain detection highly valuable.

The Recombinant Kappa antibody clone rKLC264 provides specific and reproducible recognition of kappa light chains. Recombinant production ensures uniformity across lots, reducing variability between experiments. Clone rKLC264 has been applied to studies of immunoglobulin diversity, B cell biology, and plasma cell disorders. Its reliability makes it suitable for both basic research and diagnostic applications.

Research using clone rKLC264 has supported investigations into multiple myeloma, lymphoma, and immune regulation. Monitoring kappa light chain expression provides insight into antibody repertoire and disease progression. The antibody also contributes to work on therapeutic antibody development, where understanding light chain usage is critical.

NSJ Bioreagents offers this Recombinant Kappa antibody to enable high quality research in immunology and hematology. The protein is also known as IGKC antibody, immunoglobulin kappa chain antibody, kappa immunoglobulin protein antibody, and antibody kappa light chain antibody, reflecting the varied terms found in scientific literature.

Application Notes

The optimal dilution of the recombinant Kappa antibody for each application should be determined by the researcher.
1. 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

Recombinant human Ig kappa chain was used as the immunogen for this recombinant Kappa antibody.

Storage

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