

DESCRIPTION

Species Reactivity	Human
Specificity	Detects Human Ig Kappa light chain in direct ELISAs.
Source	Monoclonal Mouse IgG ₁ Clone # 999947
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Human Ig Kappa light chain
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the Technical Information section on our website.

	Recommended Concentration	Sample
Western Blot	2 µg/mL	See Below
ELISA	This antibody functions as an ELISA capture antibody when paired with Mouse Anti-Human Ig Kappa Light Chain Monoclonal Antibody (Catalog # MAB10050). <i>This product is intended for assay development on various assay platforms requiring antibody pairs.</i>	

DATA

Western Blot

Detection of Human Ig Kappa Light Chain by Western Blot. Western blot shows human kappa light chain protein, human lambda light chain protein, human serum, primate serum, mouse serum, and rat serum. PVDF membrane was probed with 2 µg/mL of Mouse Anti-Human Ig Kappa Light Chain Monoclonal Antibody (Catalog # [MAB100501](#)) followed by HRP-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # [HAF018](#)). A specific band was detected for Ig Kappa Light Chain at approximately 25 kDa (as indicated). This experiment was conducted under reducing conditions and using [Immunoblot Buffer Group 1](#).

ELISA

Human Ig Kappa Light Chain ELISA Standard Curve. Human Ig Kappa Light Chain protein was serially diluted 2-fold and captured by Mouse Anti-Human Ig Kappa Light Chain Monoclonal Antibody (Catalog # [MAB100501](#)) coated on a Clear Polystyrene Microplate (Catalog # [DY990](#)). Mouse Anti-Human Ig Kappa Light Chain Monoclonal Antibody (Catalog # [MAB10050](#)) was biotinylated and incubated with the protein captured on the plate. Detection of the standard curve was achieved by incubating Streptavidin-HRP (Catalog # [DY998](#)) followed by Substrate Solution (Catalog # [DY999](#)) and stopping the enzymatic reaction with Stop Solution (Catalog # [DY994](#)).

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.5 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> • 12 months from date of receipt, -20 to -70 °C as supplied. • 1 month, 2 to 8 °C under sterile conditions after reconstitution. • 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

The immunoglobulin light chain is the smaller subunit of an antibody and in humans can be expressed in two types: as a kappa (κ) or a lambda (λ) chain. Antibodies are produced by B-Cells that are clonal and each expresses only one type of light chain. The light chain class remains fixed for the life of the B lymphocyte. The ratio of kappa and lambda light chains can be used to determine disease status by immunohistochemistry or ELISA based assays.